THE ELEMENTARY SCHOOL JOURNAL

VOLUME XXXI JUNE 1931 NUMBER 10

Educational News and Editorial Comment

A NATIONAL SURVEY OF SCHOOL FINANCE

Secretary Ray Lyman Wilbur, of the United States Department of the Interior, has announced a national survey of school finance to be begun the first of July and to be continued over a period of four years. At its last session Congress authorized such a survey to be made at a cost of not more than $350,000. For the fiscal year beginning July 1, 1931, $50,000 has been made available, and it is expected that $100,000 each year will be appropriated for the following three years.

William John Cooper, as United States commissioner of education, will be director of the survey. Paul R. Mort, of Teachers College, Columbia University, has been appointed associate director. Professor Mort will be in active charge of the study and will organize and direct the survey's staff, which will be composed of tax experts and specialists in school finance. Commissioner Cooper and Professor Mort will be assisted by a board of consultants, which will probably be composed of at least one state superintendent of education, a state tax commissioner, a state finance director, a city

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superintendent, a representative of the United States Chamber of Commerce, and university professors of school and public finance. Professor Mort will also have the assistance of an advisory board of citizens interested in finance as it relates to the schools. The board of consultants and the advisory board will be named by Secretary Wilbur.

The survey has been undertaken because the problems of school finance have become problems of major importance in almost every state in the nation. Various educational associations have urged the making of such a survey. At a meeting last winter the Council of State Superintendents and Commissioners of Education adopted the following resolution, which was approved by the Department of Superintendence of the National Education Association at its Detroit meeting.

> We believe that the subject of school accounting with the related administrative corollaries, including the co-operative development of a superior federal system of statistical and informational service, is of fundamental significance in the solution of educational problems. Therefore, we respectfully urge that Congress make an adequate appropriation for a period of years; first for a comprehensive study and the scientific development of basic reports to the United States Office of Education; and, second, for a thoroughgoing study of public-school finance, state, county, and local, such studies to be carried on under the direction of the United States commissioner of education.

Moreover, a study by the Research Division of the National Education Association had revealed that school finance was the outstanding problem confronting state legislatures and school officials. The table on page 723 discloses the fact that, since 1929, 86 per cent of all school legislative bills have been concerned with some aspect of school finance.

In calling the attention of the Committee on Appropriations of the House of Representatives to the need of a survey of school finance, Commissioner Cooper pointed out that twenty-five states had reported a reform in taxation in general or in school finance in particular as a matter of immediate and vital importance. He stated further that, because of the tendency of wealth to become centralized in certain urban centers, the apportionment of school funds in such a way as to equalize educational opportunities has become a vital issue in sixteen states.

The survey will deal with the problems of school finance at all educational levels—elementary, secondary, and higher. The two other surveys which are now being conducted by the Office of Education—the National Survey of Education of Teachers and the National Survey of Secondary Education—have purposely omitted any consideration of the problems of finance in order that they might be treated in the study of school finance.

This investigation is the third national educational survey to be undertaken by the Office of Education. The first, the National Sur-

STATE SCHOOL LEGISLATIVE ISSUES—1929–30 AND 1930–31

Issue	Percentage of States in Which Issue Was Important	
	1929–30	1930–31
School revenue and taxation	86	86
Apportionment of state school aid	61	73
Teacher retirement or pensions	81	70
Reorganization of state board or department of education	53	41
Increasing size of local school unit	55	50
Certification of teachers	47	40
Teacher tenure and contracts	8	32
Textbook legislation	6	25
Other problems	14	5
Number of states involved	36	44

vey of Secondary Education, is now nearing the end of the second year of its three-year period. The second, the National Survey of Education of Teachers, has been under way for almost a year and will be continued during the next two years. The authorization of this third survey should go far toward establishing the tradition of a succession of investigations on a nation-wide scale to be carried on under the auspices of the Office of Education. It would be difficult to overestimate the value to the interests of the schools of such a tradition and of the findings of a large number of national investigations competently conducted. If the reception already given to the two surveys now in progress may be taken as a guide, it may be said that school people would be glad to foster such a tradition. The third survey, in the field of school finance, will be highly serviceable

on its own account, not only because of its peculiar timeliness in these years of economic depression, but also because of the perennial character of the problems of school finance.

THE NEW COLLEGE PLAN AT THE UNIVERSITY OF CHICAGO

Some months ago the University of Chicago announced fundamental changes in its organization. A new booklet has recently been issued describing in some detail the operation of the new plan.

Henceforth the program of work of the University in arts, literature, and science will be divided administratively into five divisions: the College Division, the Humanities Division, the Social Science Division, the Physical Science Division, and the Biological Science Division. A number of the professional schools will maintain separate organizations. All Freshmen will enter the College Division, where they will pursue what is generally called "junior-college work." Upon successful completion of the work of the College Division, the student who is qualified to pursue advanced work may enter one of the four higher divisions or one of the professional schools. All degrees will be awarded by the divisions or by the schools.

In the College Division major emphasis will be put on the student's general education, although the student will be given the opportunity to pursue to a reasonable extent whatever special interests he may have acquired. The College period is regarded as a transition period between secondary education and higher education of the true university type.

Course examinations and course credits have been abolished. Class attendance will be voluntary. In determining whether a student is qualified to pass from the College Division to one of the higher divisions, the University will consider course credits and time spent in the College as negligible factors. A student may spend a long time or a short time in the College, the amount of time depending on his ability, his energy, and his previous preparation. His fitness to enter on the more specialized work of one of the higher divisions will be determined by a comprehensive examination.

The following statement, taken from the booklet *The New College Plan*, indicates what will be required of students in the College Division.

No specified courses and no stated length of residence are required in the College, since the requirements are stated solely in terms of educational attainments, measured by examinations, which may be taken by the student whenever he and his Dean agree that he is prepared to take them. In the administration of this plan the Board of Examiners may take into consideration, not only the performance of the student in the examinations, but also whatever other information may be secured from the student's instructors regarding his abilities and attainments.

In order that completion of the requirements of the College Division may signify a wholesome balance between breadth and depth of educational experience, examinations are set to demand:

(1) The attainment of the minimum essentials of factual information and an introduction to the methods of thought and work in each of four fields—the humanities, the social sciences, the physical sciences, and the biological sciences —such as may be expected of a student who has pursued through an academic year a general course at the College Freshman level in each of the four fields;

(2) The attainment of such mastery of the subject matter, techniques, skills, habits of thought, and methods of work in any two of the four fields as may be expected of a student who has pursued through an academic year in each of two of the fields a second-year course in the general field or a sequence of courses in some subject division within the general field;

(3) A demonstration in the examinations required under (1) and (2) of the student's ability to express himself with clarity and accuracy in written English;

(4) The mastery of a foreign language at the level of attainment expected of a student who offers two acceptable entrance units in a foreign language, unless the student shall have offered two acceptable entrance units in a foreign language; and a mastery of mathematics at the level of attainment expected of a student who offers two acceptable entrance units in mathematics, unless the student shall have offered two acceptable entrance units in mathematics.

The examinations for fulfilment of the requirements of the College Division may be taken during one examination period of several days or may be spread over several examination periods, subject to the limitation that all required examinations shall be passed within a period of two calendar years. A student may take part or all of the examinations at the end of one, two, or three years of residence in the College Division.

The examinations for the completion of the College requirements will not be restricted to a particular type, but will include any kind of test, investigation, problem, assignment, or creative work by which the abilities, achievements, or performance of students may be measured. We shall use the short-answer type of examination, the essay or discussion type, the problem type, and in some instances a supplementary oral examination. In the administration of the problem type we propose to give the student a problem in his field of major interest, supply him with all the books or laboratory equipment, or both, that he may think necessary for the solution of the problem and then give him sufficient time to work out and write up his solution, discussion, and conclusions. We believe

that no one of these types is adequate for all purposes; we believe that at least three, and in some instances four, types are necessary to test the different forms of mastery which the student should demonstrate that he has attained and to give the student full opportunity to exhibit his powers.

Though an instructor may test the students in his course at any time and in any manner he may choose, the comprehensive examinations at the end of the College period will be framed and administered under the supervision of an examining board, who will be responsible for seeing that the examinations are framed, individually and collectively, to demand no more but no less than the appropriate level of achievement.

In order that the student may attain the minimum essentials of the four fields—the humanities, the social sciences, the physical sciences, and the biological sciences—a general course will be offered in each of the fields. For each of the courses a syllabus with appropriate bibliographical material and sample examinations will be available in mimeographed or printed form. In these four general courses a variety of methods of instruction will be employed. The lecture method will be used in large-group sessions to the extent that may seem desirable. Small-group discussion periods, laboratory periods, and individual consultations will be provided to the extent that they may seem to be required. It is stated that the lecturers in these courses will be the best that can be recruited from the distinguished scholars on the University faculty.

As an aid to the attainment of the second requirement stated in the preceding quotation, there will be offered in each of the four fields a second-year general course as well as a variety of subject sequences of courses throughout a year. A student having a special interest will find attractive opportunities for its pursuit among the many courses offered in this second group.

An upper division may set certain specific requirements of students who seek to enter it, but in no case will these requirements be such that they may not be met in two years of College work by the average student who has offered properly distributed entrance units.

A student pursuing the normal program during the first year will take three general courses and one subject course; during the second year he will take one general course and three subject courses, or two general courses and two subject courses. In many of the College courses honor sections will be organized for students who show that

they can make progress more rapidly and penetrate more deeply in a subject than can the average student.

Although course credits will not be a factor in determining whether a student has completed the work of the College, sufficient records will be kept to enable the University to determine whether a student has been wasting his time. Each instructor will report each quarter on the progress of each student under his instruction. This report will be in written form and will set forth the instructor's observations on the student's capacity, faithfulness, habits, health, character, personality, or any other traits or qualities which may influence his effectiveness. In this way the University will have adequate records on which to base its judgment in certifying to other institutions the quality of work which a particular student has accomplished.

The work leading to the Bachelor's degree in the upper divisions will provide for an appropriate amount of specialization in a chosen subject with systematic work in closely related subjects. If the student desires, he may select some work outside his divisional field. The divisional requirements for the Bachelor's degree are now being framed and will be announced in a few weeks. Here again, requirements will be in terms of educational achievement and will be measured by comprehensive examinations and not by course credits. The requirements are being set at a level that may be attained by the average student in two years.

It should be added that, unless and until an announcement is made to the contrary, a student with a satisfactory record of two years of work in an accredited college or university will be admitted to upper-divisional (senior-college) standing without an examination and that a student with a Bachelor's degree from an accredited institution will be admitted to an upper division for graduate study without examination.

ACTIVITIES AND EDUCATIONAL VALUES

Within the past decade, approximately, procedures in schools and colleges of the more or less traditional type have been subjected to vigorous criticism on the part of the proponents of progressive schools. One of the most common criticisms of the so-called "non-progressive" schools is that they do not provide sufficient activity

for their pupils, the assumption seeming to be that pupils are passive unless they are in motion. Criticisms of the lecture method in college sometimes assume that a student is passive while listening to a lecture. These critics seem to have overlooked the fact, pointed out by William James more than thirty years ago, that not to speak or move may require as much action as to speak or move about. In an address delivered at the annual conference of the faculty of the College of Education, University of Illinois, with the superintendents of the schools of Illinois, the proceedings of which have been published as University of Illinois Bulletin No. 54, Professor E. H. Cameron made the following pertinent statement concerning activity in the schoolroom.

Perhaps the most outstanding features of the general type of schools that have some claim to the epithet "new" or "progressive" are embodied in the words "activity" and "freedom." As Rugg says in his book describing and evaluating these schools: "Free the legs, the arms, and the larynx, and you free the mind."

The newer type of schools is characterized by the fact that the pupils are much more patently moving their arms and legs and making more audible sounds with their larynxes than they do in the old-fashioned school. The proponents of the new schools say they base their views on the "new" psychology, one of which seems to be born every few years. They say that modern psychology teaches that the very purpose of the mind is to govern and control action. An older psychology thought of the mind as something, to be sure, connected in some way with a body but in nature so different that it must be thought of as apart from the body and treated and developed as an end in itself. The child's body was for the teacher a necessary evil that got in the way and hindered the true purpose of education, which concerned the mind alone. It cannot be doubted that this view of mind has been of weight in connection with traditional education. The apostle Paul thought of his body as a drag on the aspiring soul and writes, "I keep my body under." When I began teaching, the first question asked of a teacher looking for a position was "Can you keep order?" Keeping order consisted largely in the task of keeping the pupils' "bodies down." We have departed a long way from this tradition even in schools that do not describe themselves as "progressive" or "activity" schools. But it is a far cry from the doctrine that mind and body are correlative functions of a single basic unity and from the now generally accepted psychological view that the mind's proper and unique function is to guide and direct activity to the educational corollary that the advocates of these newer schools have deduced from the doctrine. Instead of being called activity schools, these schools should be called *movement* schools. Now there is a vast difference between movement and activ-

ity—or at least between moving limbs and active muscles. William James in expounding the functional point of view of mind in his *Talks to Teachers* over thirty years ago—a point of view which as I have said is now generally accepted—was very careful to make this distinction, and I doubt not for the very reason that he feared some exaggeration as a consequence of his statements. Listen to what he writes in concluding his argument that all consciousness leads to action.

"The reaction," he says, "may often be a negative reaction. Not to speak, not to move, is one of the most important of our duties in certain practical emergencies. 'Thou shalt refrain, renounce, abstain!' This often requires a great effort of will-power, and physiologically considered is just as positive a nerve function as is motor discharge."

The fact is, of course, that just because mind and body together in their intimate relationship constitute an organism whose function it is to act, it follows that this organism is always active, though not necessarily moving about or even kicking with feet and legs or moving hands and arms. The fact is, of course, that there are no schools in which the pupils are not all active. Death is the only condition in which pupils are not active.

I would not have labored so long to bring about a conclusion that is so very obvious if the leaders in the so-called activity-school movement did not base their views on some such logical formula as this: Psychology teaches that the mind functions through bodily activity; ∴ in school, children should be moving about and doing things with their hands.

Having cleared the ground in this way, we are ready to perceive more readily the real problem concerning activity in the schoolroom. The problem that we have to face is that of determining the really desirable kind of activity to be pursued. Shall the schoolroom be a place where the activity engaged in consists in movements of legs and arms and oral language, or is it more desirable that there should be activity unaccompanied by outward movement, in the form of silent language rather than of speech? Now the answer to these questions cannot be obtained from the psychology involved, as we have seen. Where shall we turn for an answer? So far as I can see, we must look to the results. One may have the opinion that the best consequences in life are those that occur in relation to non-moving activity and that, therefore, school is the place where children shall learn to perform this kind of activity. It is no proper answer to this point to say, as someone is bound to say, that it is not natural for little children to be active in this way and that it is natural for them to be active as in play. It may be taken for granted that the reason for the existence of the school is that we desire in children some other outcome than that which develops naturally. The real point is whether the method of repression of muscular movement is the best for bringing about that intellectual and moral development which we conceive to be the goal of the educative process. . . . .

It would appear then that there is considerable justification for the relative lack in overt activity in the traditional schoolroom. Indeed, it may be held

that the school exists, at least in part, for the purpose of training the young in that higher form of activity in which manifest outward movement is restrained and the process of deliberation engaged in.

MUSIC IN THE ELEMENTARY SCHOOLS

In a recent bulletin (Bulletin No. 20, 1931) published by the United States Office of Education, which contains advance sheets of the *Biennial Survey of Education in the United States, 1928–1930*, the following statement is made regarding the development of music in the elementary schools during the past ten years.

There is a marked trend in the direction of socializing the study of music in the elementary schools, and making it increasingly a factor in the whole life of the school. It is felt that music has too long been largely an isolated subject and that more advantage should be taken of its many rich possibilities for contributing to the other fields of activity and study. At the same time increasing emphasis is being given to differentiating music study to meet the various needs of pupils of different interests and talents. So we see, side by side, the broadening of the conception of music as a contribution to the whole school life with the more intensive specialization of instruction to meet individual needs.

Music teaching in the elementary schools may be considered under three headings: singing, appreciation, and playing upon instruments.

In the singing lesson, while teachers are still eager to secure good sight reading, exaggerated emphasis on this activity is gradually subsiding. Indeed, in a number of communities the pendulum seems to have swung too far in the other direction, and teachers seem to fail to realize that without a background of a certain amount of technical skill the pupils are handicapped in learning songs expressive of their own advancing tastes and interests. On the whole, however, stress on the acquirement of reading skill and emphasis on learning beautiful songs for their aesthetic values and for their contribution to social experiences seem to be achieving a reasonable balance in the singing lesson.

Within the past ten years the entire subject of music appreciation has come to be accepted practically everywhere as an integral and vital part of music education. The technique of teaching music appreciation has been completely changed within the decade. In the early years, appreciation lessons were little more than passive listening. Better pedagogical methods have been introduced, and now the keenest comparison, discrimination, judgment, and feeling of the student are called forth in hearing reproductions of great music. Teaching of the history of music has swung out of the rut of its chronology. Newer methods center upon the music itself rather than upon discussion as to what year a given evolution or development occurred. Beauty of tonal expression has come to be the *sine qua non* of all good music-appreciation work. Information about music is no longer spread before the pupils by reading treatises and articles,

biographies of composers, extraneous incidents, etc., but the newer procedure leads the children themselves to inquire, "What does the music say?" By these modern methods the students are led to true musical discrimination and to the desire and ability to express their own feelings and opinions as to what is heard. The advent of radio has brought about a splendid flowering of the whole subject of music appreciation. Teachers have learned that concerts over the air without preparation in advance are largely lost and leave no permanent residuum. The fleeting impression as it passes on the wings of air can only be caught and retained if the appreciative mind knows in advance, and therefore recognizes as it passes, the outpouring of beautiful music which now for the first time is made available to millions who never before knew that such music existed. Without the foundation of music appreciation, education through radio would probably never have gained its present foothold. Another interesting development is the growing tendency to co-ordinate the appreciation and singing lessons. More and more, teachers are realizing that all music study should contribute to the development of a finer sensitiveness to beautiful music.

Instrumental instruction today includes a number of activities, such as the toy orchestra in the kindergarten and primary grades, classes in piano, and instruction in playing instruments of the orchestra and band. A few years ago the rhythm band was considered largely a means for developing rhythmic consciousness, but of late there is a tendency to see in the toy orchestra the first step in leading the children to an interest in instrumental performance. Piano classes were found in only a few school systems ten years ago, but now hundreds of cities are offering instruction to many thousands of children in the elementary schools. At first nearly all of these cities followed the plan of charging the children small fees for their lessons, but gradually there seems to be a tendency toward making this work a part of the regular curriculum, financed by the school. Many cities are trying plans of testing children to try to ascertain aptitudes and assigning to the piano and other instrumental classes those who seem most likely to succeed in their efforts to learn to play. The classes in playing instruments of the orchestra and band have led to the formation of numerous ensembles in the elementary schools. Naturally this activity blossoms more fully in the high schools, but the start made in the grades is an important factor in the splendid instrumental work now common in high schools in every part of the country.

A TEST OF SPEED IN MANUSCRIPT HANDWRITING

The following account of a test in handwriting was published in the London *Times Educational Supplement.*

There is a common belief among secondary-school teachers that the new handwriting, often called "script," "print," or "manuscript" writing, is slower than the ordinary joined handwriting. As the very few published tests of speed seem to show that script is more rapid, it is difficult to understand how such a

firm conviction has grown up. It is only fair to say that Dr. Kimmins' tests were made at an early stage of the change of handwriting and only tested younger children and that perhaps some more evidence is needed now which will help teachers to judge the relative speed of the two forms of handwriting.

Twelve schools recently consented to co-operate to give a test. In three of these there was no script writing at all. On the whole, there were more papers with joined writing than with unjoined. The total number of writers was 2,195, and their ages ranged from nine to eighteen years. All those over sixteen were grouped together. Each school was sent typewritten directions for giving the tests. The sentence used was, "A quick brown fox jumps over the lazy dog," and the time allowed was three minutes. In addition, the pupils were asked to state what type of handwriting they first learned and how many times they had changed.

Age	Letters per Minute		Number of Papers	
	Unjoined Writing	Joined Writing	Unjoined Writing	Joined Writing
9	45	42	32	35
10	48	48	51	114
11	57	52	61	272
12	73	64	95	255
13	82	72	95	255
14	95	78	98	293
15	102	89	51	241
16 and over	115	108	72	175
Average	81	73	555	1,640

When the papers were being counted, it was difficult in many cases to distinguish between "script" writing and the ordinary joined handwriting for some children joined just a few letters, while others, especially the older ones, were apt to break off for a few. So it was decided that a strictly "half and half" principle would be adhered to, and, if more than half the letters were unjoined, the writing counted as unjoined, and vice versa.

The final result was decisively in favor of an unjoined hand. In every school, at every stage, with one exception, this handwriting proved to be quicker. The exception was a school where it was particularly difficult to distinguish between the hands as all the pupils wrote a half-joined script. In this school, at a few stages, the more joined handwriting had an advantage, but even here the average speed of the unjoined handwriting was far higher than that of the joined.

An attempt was made to see whether there was any appreciable difference in speed where there had been constant changes of handwriting, but the pupils' answers to the questions were too vague to give any valuable results. One could just get a general impression that changing one's style of handwriting

several times did not seem to make very much difference either to speed or quality. One fact is apparent, and that is that many children have had to endure several changes in their handwriting.

In conclusion, it might be useful to note which of the small letters it seemed advisable to leave unjoined. In cases where the pen has to go round and back over the same line to make a join, such as with *a*, *c*, *d*, and *g*, the quickest writers usually make a break before the letter, jumping to the point where the pen begins its return journey. It also seems to be an advantage for *g*, *h*, *k*, *l*, and *y* to be unlooped.

THE FIRST ISSUE OF THE "SIGHT-SAVING REVIEW"

In a previous issue of the *Elementary School Journal* attention was called to the announcement of the publication of a new quarterly journal by the National Society for the Prevention of Blindness. The first issue of the new journal appeared in April under the title the *Sight-Saving Review*. The magazine, it is announced, "is designed specifically to meet the needs of state and local prevention-of-blindness workers, educators, illuminating engineers, school physicians and nurses, safety engineers, public-health administrators, industrial physicians and nurses, sight-saving class teachers and supervisors, ophthalmologists, and anyone interested in the sociologic aspects of saving sight." It will attempt to "serve both popular and technical groups." Lewis H. Carris is the editor and Isobel Janowich the managing editor. A well-rounded editorial board composed of specialists now definitely engaged in work concerned with the conservation of vision will assist these two.

If one may judge from the first issue of the *Sight-Saving Review*, it will serve a very useful purpose. The list of articles includes an appreciation of the work of Ernst Fuchs, an internationally known opthalmologist who died last November; an article on the "Prevention of Blindness in the United States," which gives a concise summary of the movement for the conservation of vision; a technical article on "Conservation of Eyesight, with Special Reference to Glaucoma"; articles on the "Fundamentals of Lighting in the Home, Classroom and Industry" and on "Conserving Vision in the Nursery School and in the Kindergarten." Short sections are devoted to editorials, to news notes of the National Society for the Prevention of Blindness, to notes and comment of a more general nature, and to

current articles of interest in other magazines. A more extended section is devoted to book reviews.

The subscription price is three dollars annually. The editorial office of the magazine is located at the office of the society, 450 Seventh Avenue, New York City.

AWARD FOR EDUCATIONAL RESEARCH

Kappa Delta Pi, an honorary society in education, announces an award of one thousand dollars for the best report of research dealing with the measurement of efficiency in teaching. The award is to be made in 1932. The following conditions will govern the participants and those making the award.

No single method of investigation is specified. The research may be experimental, statistical, or philosophical in character. The pertinency of the method to the phase of the problem studied will be considered in judging the reports. The basic criteria in judging the worth of a report will be its contribution toward the solution of the problem, the validity of the techniques employed, and the organization and literary merits of the report. The reports submitted in competition will be judged first by the Executive Council of Kappa Delta Pi. The three, four, or five reports (depending on the total number received) adjudged to be best will then be submitted to a committee of members of the Laureate Chapter of Kappa Delta Pi and consulting specialists, who will select the winning report. The Laureate Chapter members are John Dewey, F. P. Graves, Mrs. Helen T. Woolley, Mrs. E. A. Park, E. L. Thorndike, W. W. Charters, C. H. Judd, E. P. Cubberley, J. E. Russell, F. W. Ballou, Mrs. Susan M. Dorsey, L. M. Terman, E. A. Alderman, P. H. Hanus, Sir John Adams, Paul Monroe, Henry Suzzallo, W. C. Bagley, L. D. Coffman, Payson Smith, and W. H. Kilpatrick. The report which receives the award will become the property of the Society, and will be published by the Society in a monograph series complementing the present Kappa Delta Pi Lectureship Series. The Society may publish in the monograph series or, in abridged form, in the *Kadelpian Review*, meritorious reports submitted in the competition which are not awarded a prize. Such publication would be without expense to the author. The Society reserves the right to reject all reports if in its judgment none is sufficiently worthy of an award and to divide the award between two contestants in the event that two reports have apparently equal merit. The competition is open to anyone, anywhere; but all reports submitted must be in the English language. Manuscripts submitted for the 1931–32 award should be in the hands of the recorder-treasurer of the Society on or before September 1, 1932. Announcement of the award will be made at the annual dinner of the Society, February, 1933. Further information may be obtained from E. I. F. Williams, Heidelberg College, Tiffin, Ohio.

A STUDY OF VOCATIONAL ATTITUDE AND INTELLIGENCE

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Since bright and dull children have been found to differ in numerous other ways, it seems logical to suppose that they would also exhibit differences in their attitudes toward occupations of various types. In order to ascertain the extent and the nature of these differences, the Lehman Vocational Attitude Quiz was administered to the pupils of six elementary schools in Kansas City, Missouri.

The vocational-attitude quiz consists in a comprehensive and catholic list of two hundred occupations. First, the children are asked to check those occupations in which they are willing to engage as life-work. They are then asked to indicate: (1) the three occupations which they would like best to follow, (2) the one occupation which they most likely will follow, (3) the three occupations which they think are the best money-makers, (4) the three occupations which they believe are most respected, and (5) the three occupations which they believe will require the least amount of effort.

Intelligence-test data were assembled by means of the National Intelligence Tests, Scale A, Forms 1 and 2. Three groups of boys were selected: (1) those having intelligence quotients of 110 and above, (2) those having intelligence quotients of 90–109, and (3) those having intelligence quotients of 70–89. In the following discussion these groups will be referred to as bright, normal,[1] and dull groups, respectively.

The vocational attitudes of nine hundred boys were studied. The school grades of these boys and the average chronological age for each grade group are presented in Table I.

[1] "Normal" refers only to the results of the mental tests.

In order to express the relationship between mental ability and occupational preference, the writers computed coefficients of correlation between the boys' mental ages and the amount of mental ability demanded by the occupations which the boys thought they would enter. The Barr Scale of Occupational Intelligence was used to assign numerical values to the occupations. The values were obtained from a composite rating of the amount of mental ability which moderate success in one hundred occupations was thought to require. Two hundred occupations are included in the Lehman Vocational Attitude Quiz, while only one hundred are given in the Barr scale. The writers assigned values to the occupations not listed

TABLE I

AVERAGE CHRONOLOGICAL AGE IN YEARS AND MONTHS OF BOYS IN EACH OF BRIGHT, NORMAL, AND DULL GROUPS IN GRADES V–VII

Group*	Grade V	Grade VI	Grade VII
Bright.....	11–4	12–3	13–2
Normal.....	11–3	12–3	13–2
Dull.....	11–4	12–2	13–2

* One hundred boys are included in each group in each grade—nine hundred boys in all.

in the Barr scale by choosing those in the Barr list which appeared to them to require about the same amount of ability as the occupations not listed. Judgments were secured and values assigned. The correlations obtained between the indexes on the Barr scale and the mental ages of the boys were: in the case of the three hundred fifth-grade boys, $.41 \pm .03$; in the case of the three hundred sixth-grade boys, $.52 \pm .03$; and in the case of the three hundred seventh-grade boys, $.58 \pm .02$.

These correlations indicate that elements other than mental age are important in determining occupational choice. It seems also that there is a somewhat consistent tendency for boys to choose progressively occupations a little more closely related to their mental ages as they go through the grades; the coefficients of correlation increase in magnitude as grade placement in school progresses. Fryer found a similar situation for two groups of university students.

He states, "It is interesting to note a general increase in vocational adjustment in both groups, paralleling advancement in education."[1]

It occurred to the writers that possibly an important factor in determining occupational choice is the influence of parental occupation. Therefore, numerical values were assigned to the occupations of the fathers by use of the Barr scale in the manner already described, and these values were correlated with the values assigned to the boys' occupational choices. The correlations between the amount of mental ability demanded by the boys' chosen occupations and the mental ability demanded by the occupations of the boys' fathers were: in the case of the three hundred fifth-grade boys, $.36 \pm .03$; in the case of the three hundred sixth-grade boys, $.39 \pm .03$; in the case of the three hundred seventh-grade boys, $.48 \pm .03$.

A positive relation is shown to exist between the intelligence demanded by the occupation of the father and the intelligence required by the occupation chosen by the son. These data corroborate the work of Bridges and Coler,[2] Pressey,[3] and Young.[4] These investigators found a positive relation between ranks of children in intelligence and the intellectual levels of the occupations of the fathers. In the present study it is of interest that the correlations between the fathers' occupations and the boys' chosen occupations are lower than those between the mental ages of the boys and the mental ability demanded by their chosen occupations. A slightly closer relation appears to exist between the children's intelligence and the intellectual requirement of their occupational preferences than exists between the children's intelligence and the intellectual status of the parental occupations.

In each school grade the boys in each ability group were of ap-

[1] Douglas Fryer, "Predicting Abilities from Interests," *Journal of Applied Psychology*, XI (June, 1927), 213–14.

[2] James W. Bridges and Lillian E. Coler, "The Relation of Intelligence to Social Status," *Psychological Review*, XXIV (January, 1917), 1–31.

[3] Luella Winifred Pressey, "The Influence of (*a*) Inadequate Schooling and (*b*) Poor Environment upon Results with Tests of Intelligence," "Minor Studies from the Psychological Laboratory of Indiana University, VI," *Journal of Applied Psychology*, IV (June, 1920), 91–96.

[4] Kimball Young, *Mental Differences in Certain Immigrant Groups*. University of Oregon Publications, Volume I, No. 11. Eugene, Oregon: University of Oregon, 1922.

proximately the same chronological age, and they came from the same school ward. Therefore, comparison of vocational choices of the several groups should prove valuable in ascertaining the relation between mental ability and vocational preference.[1]

Table II presents the mean number of occupations which, according to their answers on the vocational-attitude quiz, large numbers of unselected boys of various ages would be willing to enter. In the following discussion the expression "willingness to enter"

TABLE II

MEAN NUMBER OF OCCUPATIONS WHICH LARGE NUMBERS OF UNSELECTED BOYS OF VARIOUS AGES WOULD BE WILLING TO ENTER

Chronological Age	Number of Boys	Average Number of Occupations
8½	866	23.3
9½	1,342	20.6
10½	1,677	17.9
11½	1,640	18.0
12½	1,734	16.5
13½	1,588	15.8
14½	1,416	14.4
15½	1,244	13.6
16½	1,003	14.1
17½	606	13.9
18½	230	15.6
Total	13,346	.....

denotes the written expression of the children. The three hundred dull boys in this study expressed a willingness to enter a mean of twenty-four occupations; the three hundred normal boys, sixteen; the three hundred bright boys, fourteen. Thus, it will be noted at once that, although the dull boys were of approximately the same chronological age as the bright boys, they expressed willingness to enter many more occupations than did the bright boys. The dull boys manifested marked immaturity since, as is shown in Table II, increase in chronological age is accompanied normally by willingness to enter a smaller number of occupations. The mean number of occupations that the dull boys were willing to enter approximates

[1] "Vocational preference" here refers to present preference only; the writers do not mean to imply that vocational attitudes are permanent aspects of personality.

most closely the norm for the unselected boys of eight and one-half years of age; the mean number indicated by the bright boys approximates most closely the norm of the unselected boys of fourteen and one-half years of age.

Table III presents the specific occupations which the bright group expressed willingness to enter more commonly than did the dull group, the occupations that the dull boys were willing to enter

TABLE III

PERCENTAGES OF BOYS IN THREE GROUPS WHO INDICATED WILLINGNESS TO ENTER CERTAIN OCCUPATIONS

Occupation	Dull Group	Normal Group	Bright Group	Difference in Percentages between Dull and Bright Groups
Checked by more bright than dull boys:				
*Aviator	40	51	70	30
*Inventor	20	30	50	30
*Scientist or research specialist	16	25	40	24
**Army officer	16	22	40	24
*Mechanical engineer	8	11	22	14
Checked by more dull than bright boys:				
*Cowboy	56	50	30	26
Automobile dealer	32	20	21	11
*Theater business (other than movie)	22	10	6	16
*Fireman (answering fire alarms)	21	11	6	15
*School principal	18	8	7	11

more frequently than were the bright boys, and the percentage of each group willing to enter each of these occupations. Table IV shows the age norms for four of the occupations, that is, the percentages of large numbers of unselected boys of various ages who were willing to enter these occupations. The material given in Tables III and IV may best be interpreted in connection with a large quantity of unpublished data in possession of the writers. These data are too copious for publication in this article; the writers will therefore illustrate briefly the technique they have employed with the data.

Data were secured for 13,346 white boys, as shown in Table II. Tentative age norms were calculated for certain occupations. For

some of the occupations age differences were found to be negligible. In such cases the age norm becomes of little value. Age norms were found for all occupations which revealed significant age differences. The "age norm" in this part of the study refers only to the percentage of unselected boys of each age who indicated that they would be willing to enter a particular occupation. The assembled data seem to indicate that the norms are probably of high reliability as indexes of the *present state of opinion* of the groups studied. When the data are divided into five groups, the data for the subgroups of boys

TABLE IV

PERCENTAGES OF LARGE NUMBERS OF UNSELECTED BOYS OF VARIOUS AGES WHO INDICATED WILLINGNESS TO ENTER FOUR OCCUPATIONS*

Chronological Age	Cowboy	Fireman	Mechanical Engineer	Aviator
8½	70	30	5	40
9½	61	24	6	41
10½	57	19	7	46
11½	51	17	9	53
12½	41	13	12	60
13½	31	8	13	57
14½	22	6	14	58
15½	11	4	17	54
16½	11	2	15	52
17½	5	2	19	52
18½	5	4	18	51

* The number of cases at each grade level is shown in Table II.

display marked similarity; therefore deviations from the averages of these data are probably of significance. A sampling of four such averages is given in Table IV.

Table III shows that 56 per cent of the dull group, 50 per cent of the normal group, and only 30 per cent of the bright group of boys were willing to become cowboys. Comparison with Table IV shows that the group of three hundred dull boys revealed toward this occupation an attitude which most closely resembles that of unselected boys of ten and one-half years of age, that the group of three hundred normal boys approximated most closely the attitude of unselected boys of eleven and one-half years of age, and that the group of three hundred bright boys manifested an attitude closely resembling that of unselected boys of thirteen and one-half years of

age. In other words, the three groups of boys exhibited toward the occupation of cowboy attitudes that paralleled rather closely their various degrees of brightness as measured by the National Intelligence Tests. A similar situation was found in the attitudes of the three groups toward "fireman (answering fire alarms)." Inspection of Tables III and IV shows that the dull boys displayed an attitude similar to that of unselected boys of ten and one-half years of age, that the normal boys revealed an attitude resembling that of un-

TABLE V

PERCENTAGES OF BOYS IN THREE GROUPS WHO WOULD LIKE BEST TO FOLLOW CERTAIN OCCUPATIONS

Occupation	Dull Group	Normal Group	Bright Group	Difference in Percentages between Dull and Bright Groups
Checked by more bright than dull boys:				
*Aviator	16	36	42	26
*Detective or secret-service work	2	5	11	9
*Civil engineer	2	2	10	8
*Electrician or electrical engineer	2	3	10	8
Inventor	2	3	10	8
Checked by more dull than bright boys:				
Movie actor	24	2	0	24
*Cowboy	24	2	11	13
Mail carrier	14	8	2	12
**Soldier	18	9	8	10
Theater business (other than movie)	8	2	0	8

selected boys of twelve and one-half years of age, and that the bright boys revealed an attitude resembling that of unselected boys of fourteen and one-half years of age.

Table IV shows that the percentages of unselected boys who were willing to become mechanical engineers increased with advance in chronological age; Table III shows that willingness to become mechanical engineers increased with brightness. Here again the bright boys displayed attitudes similar to those of older unselected boys, and the dull boys responded as did younger unselected boys. This situation was found repeatedly.

For certain occupations in the vocational-attitude quiz the age

differences were not consistent. For example, the curve for aviator revealed an initial rise and a subsequent decline. In case of such a condition the writers found it advisable to compute the frequency rank of the boys' responses of willingness to enter the occupation. "Aviator" was ranked first by the bright boys and second by the dull boys. In the case of the unselected boys this occupation was ranked first by all boys of ages eleven and one-half to eighteen and one-half, inclusive; it was ranked second by younger unselected boys

TABLE VI

PERCENTAGES OF BOYS IN THREE GROUPS WHO THOUGHT THAT THEY MOST LIKELY WOULD FOLLOW CERTAIN OCCUPATIONS

Occupation	Dull Group	Normal Group	Bright Group	Difference in Percentages between Dull and Bright Groups
Checked by more bright than dull boys:				
*Aviator	10	21	28	18
Inventor	2	3	14	12
*Doctor (physician, surgeon, or specialist)	2	4	10	8
*Electrician or electrical engineer	1	2	10	9
*Architect	1	3	10	9
Checked by more dull than bright boys:				
Movie actor	10	1	0	10
*Cowboy	8	3	2	6
Grocer	8	2	1	7
Night watchman	8	0	0	8
Messenger	7	0	0	7

only, that is, boys of ten and one-half years of age. Although the percentages in this instance failed to reveal significant age differences, the ranks indicate that the attitudes of the bright boys were similar to those of older unselected boys; the attitudes of the dull boys, on the other hand, were similar to those of younger unselected boys.

In Tables III, V, VI, VII, and VIII one asterisk appears in front of the name of each occupation toward which the bright group displayed an attitude that resembled closely that of older unselected boys and toward which the dull boys behaved in a manner similar to younger unselected boys.[1] Two asterisks appear in front of the

[1] In the placing of the asterisks differences in both percentages and frequency ranks were taken into account.

names of those occupations toward which the dull boys exhibited a relatively mature attitude. Asterisks have been omitted when both

TABLE VII

PERCENTAGES OF BOYS IN THREE GROUPS WHO THOUGHT CERTAIN OCCUPATIONS ARE THE BEST MONEY-MAKERS

Occupation	Dull Group	Normal Group	Bright Group	Difference in Percentages between Dull and Bright Groups
Checked by more bright than dull boys:				
*Movie actor	12	10	22	10
Inventor	4	5	14	10
*Architect	2	4	10	8
Aviator	12	19	20	8
*Civil engineer	4	8	12	8
Checked by more dull than bright boys:				
*Sheriff or policeman	7	3	0	7
*Cowboy	11	2	1	10
Bookkeeper	8	1	0	8
Professional boxer or wrestler	6	0	0	6
Lawyer	24	10	18	6

TABLE VIII

PERCENTAGES OF BOYS IN THREE GROUPS WHO THOUGHT CERTAIN OCCUPATIONS ARE THE MOST RESPECTED

Occupation	Dull Group	Normal Group	Bright Group	Difference in Percentages between Dull and Bright Groups
Checked by more bright than dull boys:				
*Inventor	2	4	15	13
*Musician	2	6	12	10
Civil engineer	0	8	10	10
*Politician or statesman	3	3	12	9
*Doctor (physician, surgeon, or specialist)	14	20	22	8
Aviator	14	10	22	8
Checked by more dull than bright boys:				
*Fireman or engineer on a train	12	2	1	11
Explorer	9	1	0	9
Librarian	8	2	1	7
Movie actor	6	2	0	6
*Sheriff or policeman	5	5	0	5

age differences and frequency ranks for unselected boys were of doubtful reliability or of questionable significance. In these tables a single asterisk occurs twenty-nine times; a double asterisk, only two times. This fact indicates that, in more than 90 per cent of the cases where age differences were found to be especially meaningful, the bright boys' attitudes were similar to those of older unselected boys and the dull boys' attitudes resembled those of younger unselected boys. In less than 10 per cent of the cases was this condition absent.

Further analysis of the data yielded evidence of another interesting difference in the vocational attitudes of the bright and the dull boys. Twenty-one per cent of the bright boys and 32 per cent of the dull boys considered the occupation which they will probably follow[1] as one of the three best money-makers. Thirty-six per cent of the bright boys and 20 per cent of the dull boys thought their probable vocational pursuit was one of the three occupations of the entire list which is most respected. Only 8 per cent of the bright boys and 12 per cent of the dull boys thought that their chosen occupation was one of the three endeavors which required the least amount of effort. These differences suggest that monetary reward is not so potent a factor in determining the occupational choice in the case of bright boys as in the case of dull boys. Bright boys appear to be affected greatly by the factor of respect for their work and are probably influenced also by the relative superiority of their homes, since investigations have demonstrated rather conclusively that bright boys are found more often than are dull ones in homes of superior social and economic status.

CONCLUSION

Collectively, the data presented in this article reveal immature attitudes on the part of the dull boys and relatively mature attitudes on the part of the bright boys. The dull group expressed willingness to enter a conspicuously larger number of occupations than did the bright group. The dull boys appeared to choose occupations somewhat indiscriminately. This attitude also characterizes boys of

[1] In this study no attempt has been made to evaluate the soundness or the permanence of the boys' responses. This study concerns largely the relative degrees of maturity of the three groups in responses to the Lehman Vocational Attitude Quiz.

younger chronological ages. Maturity of response was associated positively with mental age in all sections of the quiz.

Data for large numbers of unselected children have led the writers to conclude that children's attitudes toward various vocations are acquired in much the same manner that most other learning is acquired, namely, by a rather long process of trial and error. The bright boys, however, appeared to be maturing more rapidly than the dull boys. It is of interest that the bright boys manifested a relatively high degree of maturity both in their ability to achieve success in the National Intelligence Tests and in their attitudes toward various types of life-endeavor. The data presented in this article suggest that children who do best on the National Intelligence Tests also have better practical judgment and superior ability to envisage and to face future reality. These facts lead the writers to conclude that dull boys may be in even greater need of vocational guidance than are bright boys.

Here it is of interest to note that some of the dull boys stated that they expected to enter certain professions. Since numerous investigators have found that professional persons possess larger intelligence quotients than those possessed by average persons, it seems plausible that dull boys will find it necessary in many instances to reconcile themselves to humbler types of work. Since it is probable that the dull boys who choose professions will often find it necessary to change their occupational choices, one might ask logically whether the vocational counselor would not be justified in hastening the process of adjustment. The enthusiastic mental-tester might take the position that it is better to know one's limitations (and to suffer) while young than to receive more severe disappointment later because of having cherished unattainable ambition.

Probably all will agree that most high-testing pupils should be encouraged to retain high vocational ambition. It is questionable, however, whether *all* low-testing pupils should be directed into humble types of work. Since some individuals of mediocre ability seem to compensate for their lack of tested ability by industry and persistence, or by other personality traits, and since nobody now knows the extent to which this compensation becomes effective, it seems that for the present the best policy is to proceed cautiously

pending the accumulation of a large body of factual material. K. S. Lashley has said that, as regards brain activity, frank confession of ignorance is more hopeful for future progress than is a false assumption of knowledge.

> We seem to have no choice but to be vague or to be wrong, and I believe that a confession of ignorance is more hopeful for progress than a false assumption of knowledge. . . . . For immediate progress it is not very important that we should have a correct theory of brain activity, but it is essential that we shall not be handicapped by a false one.[1]

In no field are Lashley's remarks more applicable than in the field of vocational guidance. For immediate progress in this field careful and prolonged follow-up studies are obviously essential. Such studies should take into account, among other things, (1) the children's present expressions of vocational preference, (2) the extent to which bright and dull children modify their choices with increased maturity, (3) the extent to which low-testing and average pupils actually enter the professions, and (4) the success attained by the several types of pupils in vocational pursuits. Anything short of this program will be mere speculation, and of speculation we have already had a sufficient amount.

[1] K. S. Lashley, "Basic Neural Mechanisms in Behavior," *Psychological Review*, XXVII (January, 1930), 23–24.

TO MARK OR NOT TO MARK?

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Although the problems of school marks and marking systems have received expert attention for more than two decades and although many valuable and definite conclusions have been drawn from scientific studies of the matter, many teachers and schools still seem to be at sea as to the sort of marking system to use and as to the proper functions of the system. Judging from letters that come to him, the writer believes that a large part of the confusion results from unfamiliarity with the results of the research which has been done. Support to this conclusion is found in a recent study by Gilchrist,[1] who obtained responses from 207 teachers and 26 principals indicating the items in their preparation for teaching in which they considered they had had inadequate training. Among the items in which they felt most inadequately trained were "Methods of improving written examinations" and "Use of the results of tests." In a list of twenty items dealing with tests and measurements, "Marks and marking systems" was ranked eighth in order of inadequacy of training. The implications of Gilchrist's study are that the teachers and principals in his group consider these phases of measurement of sufficient value to warrant their being given more time and attention in teacher-training institutions than are now given these subjects. About three years ago the writer made a study[2] which leads to the same conclusion. In this study it was found that teaching graduates of the State Normal School, Lewiston, Idaho, ranked the course in educational tests and measurements second from the top in special teaching value. Practice teaching was ranked only a trifle higher although in the training-school schedule this subject received a time allotment four times as great as did the course in measurements.

[1] Robert S. Gilchrist, "Inadequacy of Training of Secondary-School Teachers and Principals," *School Review*, XXXIX (February, 1931), 140–46.

[2] I. N. Madsen, "The Normal-School Curriculum through the Eyes of Its Graduates," *Elementary School Journal*, XXIX (November, 1928), 181–88.

The foregoing considerations lead the writer to think that it may be worth while in the present article to attempt to give, as far as it is possible to do so, definite answers to the questions most frequently asked about school marks and marking systems. Among such questions have been the following: (1) Would it not be best to abolish marking? (2) What are the proper functions of a marking system? (3) Should the examination given be of the traditional essay type or of the objective type, such as the true-false, the multiple-choice, or the completion tests? (4) Should a percentage system or a letter system of marks be used? (5) Should the normal curve be used as a basis for marking? (6) Should failing marks be given? (7) Should such matters as effort and deportment be considered in determining the final mark? (8) Is it possible to develop in pupils the right attitude toward marks?

It is clear that if the first question were answered affirmatively, answers to the others would be unnecessary. This question will, therefore, be discussed first. On several occasions the writer has heard it suggested from the lecture platform that examinations and marking should be abolished. One lecturer argued that pupils would do much better work if not subjected to examination. Just how he had discovered this without testing he did not divulge. The fact is, of course, that the work of pupils can only be evaluated by subjective or objective examinations and that of these, as will be shown, the latter are much the better. The objections to examinations and marks urged by this lecturer are familiar, namely, that they result in too much standardization of subject matter, that pupils will work for marks rather than for more desirable educational objectives, and that many will, therefore, be working merely to "get by." Unfortunately it is true that these are the motives and attitudes of many pupils. However, these attitudes are not necessarily the fault of the examination but may be due to the wrong use of it. This sort of limitation in the teacher is not peculiar to the proper use of examinations and marks but may be found in connection with every device or method the teacher uses. Thus, she may so misuse a good method of teaching that poor or even harmful results are obtained.

Another objection sometimes made to examinations and marks is that invidious comparisons between the pupils who get high marks

and those who get low marks are bound to be made. The inference is that grief, shame, jealousy, or other undesirable emotional attitudes will result. So anxious are some of the proponents of this notion to conceal or gloss over individual differences in achievement that they go to absurd lengths. A few years ago a prominent lecturer told a large audience of teachers that he had succeeded in eliminating individual differences by a plan of individual instruction in which each pupil was allowed to progress at his own rate. Who could blame the teachers for the tremendous applause with which they received such an epoch-making announcement? The plain fact, of course, is that this lecturer had merely shifted the individual differences in capacity to master a given unit of work to differences in rate of progress. Moreover, the same lecturer has revealed in cold print in a number of publications that readiness for promotion is determined by testing.

Another objection to the systematic use of school marks comes from some of the more enthusiastic protagonists of the so-called "child-centered" schools. These schools rightly desire to take more advantage of the child's initiative, interest, self-expression, group activity, etc. They believe that mastery of the traditional school subjects is not the most essential outcome but that the development of personality, attitudes, and the like should receive much attention. They believe further that the traditional school with its standardized curriculum and its emphasis on measurement tends to make it difficult, if not impossible, to realize the more important outcomes. There is not space here to evaluate the claims of the child-centered schools. It may simply be stated that such schools are still in the experimental stage and that they are exceedingly few in number. It may also be mentioned that the more responsible leaders of the movement recognize the necessity for some means of evaluating the efficiency of their schools.[1] From the standpoint of testing, therefore, these schools would merely necessitate the measurement of additional outcomes and perhaps the use of other techniques of measurement. At any rate, until the existing educational order is replaced by

[1] See, for example, Harold Rugg and Ann Shumaker, *The Child-centered School*, pp. 120, 129–30, 140, 300–301, 317. Yonkers-on-Hudson, New York: World Book Co., 1928.

another—a replacement which is not likely to occur in the immediate future—the schools cannot escape the necessity for measuring. It goes without saying that the best means available should be used.

The suggestion that marking or testing can be completely eliminated may therefore be rejected as impractical. Properly used, examinations and marks have many useful functions. (1) They are useful in making reports to parents. No matter what kind of school their children attend, the parents will want to know how the children are getting along. (2) Examinations are useful in testing the retention and comprehension of the pupil. Without the use of some method of testing, teachers, pupil, and parents can have nothing but very inaccurate notions of how much a pupil has profited by going to school. This point will be clearer after the later discussion about the unreliability of subjective estimates has been read. (3) Examinations are useful also in determining a pupil's achievement status. This fact is important in determining remedial work, promotions, classifications within a grade, placement of pupils from other schools, and the like. (4) A fourth function of examinations is that of motivation. Here reference is not made to motivation through fear of failure. Research by such authorities as Starch, Monroe, and Gates has shown that one of the most fruitful forms of motivation consists in letting pupils see frequently just how they are progressing.[1] This is probably one reason why boys are willing to spend endless hours on the playground practicing baseball, jumping, and the like. When these activities are practiced, concrete and definite means of measuring progress are used. Good tests may be used with the same effect in motivating school work. (5) A fifth function of examinations is to provide means of diagnosing a pupil's difficulties. It is clear that a teacher's investigation of a pupil's difficulties made by means of a formal test will be much more thorough than an investigation made by means of a casual observation of the pupil's work. (6) Properly devised examinations are useful in providing definite goals. Without such examinations goals are bound to be vague and intangible. (7) Finally, examinations may be used by the teacher for determining her own efficiency, and she is thus enabled

[1] See I. N. Madsen, *Educational Measurement in the Elementary Grades*, pp. 244–45. Yonkers-on-Hudson, New York: World Book Co., 1930.

to take steps for self-improvement. Other uses of examinations could be listed, but the foregoing must suffice.

It is obvious that, to realize any or all of these functions, teachers should use only tests or examinations that are trustworthy. As most teachers are familiar with the objections to the examination of the typical essay type, these objections will be only briefly referred to here. The marking of essay tests has been found to be too subjective. Thus, one of two competent teachers marking the same pupil's paper may give the pupil an A, while the other teacher gives him an F. Indeed, it has been found that after a short interval of time a teacher has difficulty in agreeing with her first mark. The lack of objectivity of the essay test, of course, endangers its validity as well as its reliability. The essay test is also time-consuming both for the pupils who write it and for the teachers who mark it. Hopkins[1] tells of an experiment in which one hundred high-school teachers marked one pupil's final history examination of the essay type consisting of ten questions. The results ranged all the way from failure to an almost perfect score. The lowest percentage mark given was 62, the highest was 98, and the average was 85. The same teachers then marked another examination paper in United States history consisting of one hundred true-false items, using a definite key. In this case all the teachers gave the paper the same score of 68. In other words, all the scorers arrived at the same conclusion as to the merits of the paper. Hopkins concludes by saying: "It can be stated, therefore, as a general rule that, other things being equal, the more objective the method, the more accurate the results." In view of the foregoing considerations, it may be concluded that classroom teachers should learn to construct examinations of the new objective types. This, no doubt, is superfluous advice to the more experienced teachers, who are already rather generally using such examinations.

The next question is whether a percentage system or a system using letters, words, or figures is to be preferred. In general, authorities in measurement consider the percentage system the least desirable. The following are among the objections to this system. (1) It leads to the erroneous notion that an examination is an absolute

[1] L. Thomas Hopkins, *Curriculum Principles and Practices*, pp. 260–61. Chicago: Benj. H. Sanborn & Co., 1929.

measure of accomplishment—that 0 per cent indicates no ability in the subject tested and that 100 per cent indicates complete or perfect accomplishment. As an illustration, an eighth-grade boy may make a mark of 0 per cent in arithmetic and yet have considerable skill in the arithmetic of the lower grades. On the other hand, he may make a mark of 100 per cent in this subject and yet be very far from having mastered the whole topic on which he is tested. (2) The percentage system leads to a false notion of accuracy. Research has shown that a teacher, when remarking a set of papers some weeks after the first marking, will differ by about 10 per cent, on the average, from her first marks. Yet teachers attempt to make fine distinctions by giving a pupil such a mark as $89\frac{3}{4}$ per cent! Such distinctions are, of course, spurious.

The next question relates to the use of the normal curve as a basis for marking. The answer is that the normal curve should be used as a guide in distributing marks. Research has repeatedly shown that, when fairly large groups are accurately measured, the resulting frequency tables conform to the normal frequency distribution. It follows that, unless all teachers use the normal curve as a guide in their distribution of marks, their marks will not be comparable. Thus, a mark of B in one class might be no better than a C or even a D in another. The writer would emphasize that the teacher should not adhere slavishly to this device and attempt to make the distribution of marks conform rigidly in each and every class. In the long run, however, she should expect a fairly close conformity.

The question which logically follows is: Should any failing marks be given? Suppose, for example, that the marking system uses five letters and that the normal curve demands 5 per cent of F's. Does this requirement mean that 5 per cent of the pupils *must* fail? Not necessarily. A good argument can be made, for example, for the statement that elementary-school pupils and perhaps high-school pupils should not fail if by failure is meant the necessity of repeating the work. In professional schools, of course, failure must be determined, at least partly, by considerations of the rights of the students' future patients, clients, pupils, etc. However, pupils attend elementary school because of compulsory-school laws, and they have little or no option in their choice of subjects. If they are working consci-

entiously and doing their best, it is nothing short of cruelty to expect more. In addition, repeated failure is likely to create a dislike for the subject and even for school. The mark of F can be regarded as merely the lowest quality of work in the class. If the mark is accurately determined, it retains its value for the teacher in fixing the status of the pupil and thus gives to her or to her successor a reliable guide in further treatment.

Will not F's of even this type have a disastrous effect on the pupil's attitude to the subject or the school? Again, not necessarily. The effect will depend on the attitude of the teacher. If she makes invidious comparisons or nags, disastrous results may follow. If, however, she takes a sympathetic, co-operative attitude, the results will not be disastrous. Pupils are accustomed to such relative failure in their extra-curriculum activities, such as athletics, debating, and running for office. Moreover, they will, as adults, have to become accustomed to it. The attempt to gloss over or to conceal differences in achievement smacks of educational demagogism. To the mind of the writer, it is a wholesome thing to encourage scholarship contests such as those that have been conducted on a state-wide scale by the Kansas State Teachers College of Emporia. Why should we not encourage excellence in scholarship as much as we now encourage excellence in athletics?

The question whether such matters as effort and deportment should influence a mark now arises. Emphatically not. Such a procedure would result in making the marks ambiguous and valueless. It would be impossible, for example, to know whether a pupil's mark of C in arithmetic meant that his proficiency in this subject was average—as the grade implies—or whether his smile for his teacher and his willingness to work were also indicated. Such a grade would be worthless as a measure of status for a succeeding teacher and as a permanent record. If effort, deportment, and similar traits are important, they should be rated and recorded separately.

The final question is whether it is possible to create in pupils the proper attitude toward marks. As has already been pointed out, this possibility is largely up to the teacher. If she knows her job, the pupil's attitude will be right. Of course, marking should never be used as a threat. Some of the more important functions of marks

have been discussed, but motivation through the fear of receiving an undesirable mark is not one of those functions. Some teachers, however, cannot bring themselves to give truly reliable marks that actually have meaning and that differentiate between levels of achievement. What a teacher of this type really wants is a marking system using only such terms as "superior," "good," "excellent," "fine," "great." Such a system means nothing and soon earns the contempt of the pupils themselves. Nothing is farther from the truth than the assumption that pupils do not desire or cannot stand reliable information concerning their test scores. Fortunately a number of investigations and researches are available on this point, only two of which will be summarized and commented on.

The first of these is a study[1] the purpose of which was to determine the effects on pupils of a knowledge of their intelligence levels. The investigation was prompted by the frequent assertions that such knowledge has a bad effect. The investigator found that college examiners voted almost unanimously in favor of giving out this information. On the other hand, it was found that many city-school superintendents who used intelligence tests for purposes of making classifications according to ability did not, as a rule, want to give out the information secured. However, it was also found that in schools where this information was not given out, 95 per cent of the pupils knew to which ability group they belonged. The investigator next conducted an experiment to determine the effect on students' scores on a retest when they were told their first scores. Some students who made low initial scores were deliberately told that their scores were high, while others in this group were told their true initial scores. Some who made high initial scores were deliberately told that their scores were low, while others in this group were given their true scores. It was found that, regardless of the information given the different groups, the scores on the retests were about the same as the initial scores. As to the actual attitude of the students toward the tests, they were found to be either indifferent or slightly benefited by a knowledge of their scores. In a review of Allen's study Toops remarks:

[1] Clinton M. Allen, *Some Effects Produced in an Individual by Knowledge of His Own Intellectual Level*. Teachers College Contributions to Education, No. 401. New York: Teachers College, Columbia University, 1930.

The widely-held belief that dire results follow if a person is told his intelligence-test score has been shown .... to be unfounded.....

The protagonists of the practice of withholding intelligence scores from pupils and students are put on the defensive to as great an extent as is the doctor who, while there is still chance for improvement, deliberately withholds from a patient a knowledge of his physical condition.[1]

From the foregoing, the writer does not wish to be understood as recommending that elementary-school teachers and supervisors should give out intelligence-test scores. Perhaps the sanest procedure would be to announce simply that the results are for the teacher's guidance in determining the help needed by the pupils. Much more of an announcement than this is probably a waste of effort and time. The writer wishes to point out, however, that, if giving out intelligence-test scores is as harmless as Allen's study indicates, certainly no bad consequences can possibly follow if a pupil knows his exact status in arithmetic or history or some other subject, unless the teacher deliberately chooses to make invidious or humiliating comparisons. Support to this statement is given in a recent study by Gilbert. In this study Gilbert attempted to determine to what extent high-school pupils are affected by the stigma of failure in school subjects. He states his significant conclusions as follows:

While individual cases doubtless demand special care with respect to inferiority complexes, the vast majority of high-school students have far too large a measure of the self-confidence of youth to be permanently wrecked or even seriously retarded by so minor a matter as the teacher's estimate of their knowledge of a "book subject." This fact is probably the most important and most hopeful characteristic of youth.[2]

It may, therefore, be concluded that, so long as the teacher uses even a modicum of common sense, she may freely proceed to obtain reliable marks for the various purposes indicated in this article.

[1] Herbert A. Toops, "The Effect on Pupils of a Knowledge of Their Intelligence Levels," *School Review*, XXXVIII (December, 1930), 789–90.

[2] Harry Howard Gilbert, "High-School Students' Opinions on Reasons for Failure in High-School Subjects," *Journal of Educational Research*, XXIII (January, 1931), 49.

SUMMARY OF ARITHMETIC INVESTIGATIONS (1930)

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This is the sixth of a series of annual summaries of the quantitative and critical literature of arithmetic which has appeared in the *Elementary School Journal*. These summaries have been supplements to the monograph *Summary of Educational Investigations Relating to Arithmetic*, which was published in June, 1925, by the Department of Education, University of Chicago. In the original summary and the five earlier supplements a total of 584 references have been listed. The present summary adds 63 titles to the list.

The references on arithmetic during the year 1930 are more numerous than usual because of the fact that the Twenty-ninth Yearbook of the National Society for the Study of Education was devoted to this subject. A considerable number of the following references are to be found in that volume. The writer found a total of 113 published articles or books for the year 1930, but of this number 50 are omitted on the grounds that they are merely opinionated studies or are lacking in quantitative data. The remaining 63 references follow together with their annotations.

BIBLIOGRAPHY

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A Study of the Comparative Value of Two Methods of Improving Problem Solving Ability in Arithmetic. Philadelphia: University of Pennsylvania, 1930. Pp. 68.
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2. BEITO, E. A., and BRUECKNER, LEO J.
"A Measurement of Transfer in the Learning of Number Combinations," *Report of the Society's Committee on Arithmetic*, pp. 569–87. Twenty-ninth Yearbook of the National Society for the Study of Education. Bloomington, Illinois: Public School Publishing Co., 1930.

An experimental study of transfer. Finds that "when pupils of any mental level are taught only the direct form of an addition combination such as $\frac{7}{4}$ as nearly as can be, the reverse form, $\frac{4}{7}$, is learned concomitantly at least as completely as the direct form."

—3. BROWNELL, W. A.
"The Techniques of Research Employed in Arithmetic," *Report of the Society's Committee on Arithmetic*, pp. 415–43. Twenty-ninth Yearbook of the National Society for the Study of Education. Bloomington, Illinois: Public School Publishing Co., 1930.
An elaborate analysis of the techniques of research which have been used in arithmetic. Classifies the entire quantitative literature of arithmetic up to 1929 according to nineteen categories of technique and sixty-seven types of problems investigated.

4. BRUECKNER, LEO J.
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"Tools and Technique of Diagnosis in Arithmetic," *Educational Outlook*, IV (May, 1930), 200–209.
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A lengthy discussion of problems of training teachers of arithmetic. Also discusses the desirable content of courses to train teachers for the primary grades, the intermediate grades, and the grammar grades.

10. BUCKINGHAM, B. R., and MACLATCHY, JOSEPHINE.
"The Number Abilities of Children When They Enter Grade One," *Report of the Society's Committee on Arithmetic*, pp. 473–524. Twenty-ninth Yearbook of the National Society for the Study of Education. Bloomington, Illinois: Public School Publishing Co., 1930.
A detailed inventory of the number abilities of first-grade children. Contains a large quantity of new data and a summary of all previous investigations related to this problem.

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"A Critical Survey of Previous Research in Arithmetic," *Report of the Society's Committee on Arithmetic*, pp. 445–70. Twenty-ninth Yearbook of the National Society for the Study of Education. Bloomington, Illinois: Public School Publishing Co., 1930.
A brief summary of various types of research in the field of arithmetic.

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"Summary of Arithmetic Investigations (1929)," *Elementary School Journal*, XXX (June, 1930), 766–75.
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"Rehabilitation in Arithmetic with College Freshmen," *Peabody Journal of Education*, VIII (July, 1930), 24–27.
Reports inability of college Freshmen in arithmetic as shown by scores on Woody-McCall tests in mixed fundamentals. Also describes the method used to bring these students up to eighth-grade standards.

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"Methods of Arithmetic Problem Solving," *Mathematics Teacher*, XXIII (November, 1930), 442–50.
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*This reference came to the attention of the writer too late to be included in the summary for 1929.

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"The Arithmetic Curriculum," *Report of the Society's Committee on Arithmetic*, pp. 65–142. Twenty-ninth Yearbook of the National Society for the Study of Education. Bloomington, Illinois: Public School Publishing Co., 1930.
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"Remedial Cases in Arithmetic: Case 4," *Peabody Journal of Education*, VII (May, 1930), 362–72.
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*This reference came to the attention of the writer too late to be included in the summary for 1929.

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"Knowledge of Arithmetic Possessed by Young Children," *Seventh Annual Conference on Elementary Supervision*, pp. 50–85. Bulletin of the School of Education, Indiana University, Vol. VI, No. 6. Bloomington, Indiana: Bureau of Coöperative Research, Indiana University, 1930.
A report of an elaborate survey of the knowledge of arithmetic possessed by over twenty-five hundred young children. Contains detailed analysis of results and a copy of the survey test which was used. A valuable reference.

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"Some Investigations Resulting from the Testing Program in Arithmetic," *Seventh Annual Conference on Educational Measurements*, pp. 30–49. Bulletin of the School of Education, Indiana University, Vol. VI, No. 5. Bloomington, Indiana: Bureau of Coöperative Research, Indiana University, 1930.
Reports results from three investigations, the first dealing with the influence of specialized drill in reading on the solution of verbal problems, the second with transfer effects of three different methods of teaching, and the third with a case study of a seventh-grade pupil who was doing unsatisfactory work in arithmetic.

INEQUALITIES IN EDUCATIONAL OPPORTUNITIES IN THE WHITE ELEMENTARY SCHOOLS IN TENNESSEE

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In the United States it is a recognized principle of government that the education of children is one of the fundamental obligations of the state. It is the duty of each state to secure educational opportunities for all the children in the state and, as nearly as possible, to equalize these opportunities.

There are several factors which are important in determining the degree and character of educational opportunities and results. Some of the most significant factors pertain to the assessed valuation of wealth; the value of school property per child enrolled in school; the school expenditures as measured by the number of teachers, the number of children enrolled, the number of children in average daily attendance, and the amount paid for the salaries of teachers; the percentage of school enrolment in average daily attendance; the percentage of the scholastic population enrolled; the length of the school term; and the training, certification, and experience of the teachers. This study treats the inequalities in these factors prevailing in the county and city white elementary schools in Tennessee and in the white elementary schools in nine selected counties in Tennessee.

INEQUALITIES IN EDUCATIONAL OPPORTUNITIES EXISTING IN COUNTY AND CITY SCHOOLS

In the comparison of the county and city schools the items considered are (1) the qualifications of the teachers, (2) the salaries of the teachers, (3) the value of school property per child enrolled, and (4) the length of the school term.

Qualifications of teachers.—Several elements enter into the qualifications of teachers. The chief of these pertain to the experience,

training, and certification of teachers. The annual report of the commissioner of education of the state of Tennessee[1] shows that, in the school year 1926–27, 9,453 white teachers were employed in county elementary schools and 2,755 white teachers were employed in the city elementary schools in the state. Of the county teachers 1,911, or 20.2 per cent, had had no previous teaching experience; only 105, or 3.8 per cent, of the teachers in city schools were without

TABLE I

DISTRIBUTIONS OF 9,453 WHITE TEACHERS IN COUNTY ELEMENTARY SCHOOLS AND OF 2,410 WHITE TEACHERS IN CITY ELEMENTARY SCHOOLS ACCORDING TO EDUCATIONAL PREPARATION IN SCHOOL YEAR 1926–27

EDUCATIONAL PREPARATION	COUNTY SCHOOLS				CITY SCHOOLS			
	Number of Men	Number of Women	Total	Per Cent	Number of Men	Number of Women	Total	Per Cent
College graduate	105	240	345	3.6	37	194	231	9.6
Three years in college	67	271	338	3.6	29	394	423	17.5
Two years in college	183	804	987	10.4	34	698	732	30.4
One year in college	226	1,240	1,466	15.5	9	452	461	19.1
High-school graduate	768	3,492	4,260	45.1	14	333	347	14.4
Three years in high school	194	389	583	6.2	1	96	97	4.0
Two years in high school	237	435	672	7.1	0	28	28	1.2
One year in high school	131	153	284	3.0	0	2	2	0.1
Elementary school	192	326	518	5.5	2	87	89	3.7
Total	2,103	7,350	9,453	100.0	126	2,284	2,410	100.0

previous teaching experience. If it may be assumed that the percentage of teachers without previous teaching experience who are employed annually represents the teacher turnover each year, the conclusion is that the percentage of teacher turnover in the county schools was almost six times as great as that in the city schools.

The training of 9,453 white teachers in county elementary schools and 2,410 white teachers in city elementary schools in Tennessee in 1926–27 was reported by the state commissioner of education in 1927. The amount and kind of training are shown in Table I. This table shows that the largest single group of county teachers, 4,260, or 45.1 per cent, had had only high-school training and that the

[1] Unless otherwise stated data in this article are derived from the *Annual Report of the Department of Education, State of Tennessee, for the Scholastic Year Ending June 30, 1927.*

largest single group of city teachers, 732, or 30.4 per cent, had had two years of college training. These figures give conclusive evidence that the teachers in the city schools had much the better training. In order to present the significance of these facts more clearly, it may be stated that 33.2 per cent of the teachers in county schools had had college training as compared with 76.6 per cent of the teachers in the city schools. Sixty-six and eight-tenths per cent of the teachers in the county schools had had no more than high-school training compared with 23.4 per cent of the teachers in the city schools with similar training.

TABLE II

DISTRIBUTIONS OF 9,453 WHITE TEACHERS IN COUNTY ELEMENTARY SCHOOLS AND OF 1,471 WHITE TEACHERS IN CITY ELEMENTARY SCHOOLS ACCORDING TO TYPE OF TEACHING CERTIFICATE HELD IN SCHOOL YEAR 1926–27

TYPE OF CERTIFICATE	COUNTY SCHOOLS				CITY SCHOOLS			
	Number of Men	Number of Women	Total	Per Cent	Number of Men	Number of Women	Total	Per Cent
Permanent professional...	161	677	838	8.9	52	503	555	37.7
Four-year professional....	221	1,259	1,480	15.7	14	343	357	24.3
Limited professional.....	437	2,438	2,875	30.4	9	172	181	12.3
Permanent examination..	433	933	1,366	14.4	6	102	108	7.3
Four-year examination...	274	484	758	8.0	1	91	92	6.3
Five-year examination....	88	159	247	2.6	4	47	51	3.5
Two-year examination....	231	933	1,164	12.3	2	73	75	5.1
Permit.....	258	467	725	7.7	2	50	52	3.5
Total.....	2,103	7,350	9,453	100.0	90	1,381	1,471	100.0

In 1926–27 there were 9,453 white teachers holding Tennessee certificates to teach in white county elementary schools and 1,471 white teachers holding Tennessee certificates to teach in white city elementary schools. Table II shows the type of certificates held by the men and women, separately. All the professional certificates enumerated in Table II are based on periods of training and on credits earned in approved schools. In order to secure a permanent professional certificate, the applicant must have attended an approved higher institution of education for a period of two years and must have earned credit of ninety quarter hours, eighteen of which must be in education. To secure a four-year professional certificate, the

applicant must have attended an approved college or university for a period of one year and have earned credit of forty-five quarter hours, nine of which must be in education. The limited professional certificate may be obtained by a high-school graduate who attends an approved higher school for twelve weeks and earns credit of twelve quarter hours, three of which must be in education. The examination certificates, as the name implies, are issued to applicants who pass examinations given by the state department of education. Permits to teach are granted to persons who are recommended by the county superintendents and who are approved by the state commissioner of education when licensed teachers cannot be secured to fill all the teaching positions. These permits are valid only until the next regular state examination for teachers. After taking this examination, many holders of permits become holders of examination certificates. The comparative status of the certification of teachers in county and city elementary schools may be better understood by considering all certificates as professional and examination. Since many permits become converted into examination certificates, they are grouped with the examination certificates in this consideration. The certificates of 54.9 per cent of the teachers in county schools were determined by professional preparation rather than by examination, while the certificates of 74.3 per cent of the teachers in city schools were determined in this manner. Forty-five and one-tenth per cent of the teachers in county schools held examination certificates compared with 25.7 per cent of the teachers in city schools. These data indicate that the city teachers were better trained than the rural teachers. The data presented in Tables I and II corroborate this statement.

Salaries of elementary-school teachers.—The report of the commissioner of education of Tennessee for 1927 gives the monthly salaries of the men and women teachers in the elementary schools in ninety-two counties as well as the salaries of the elementary-school teachers in the cities in fifty-seven of the ninety-five counties in Tennessee. These data are given in Table III. The lowest monthly salary paid by any county to white teachers in county elementary schools was $48.10, while the lowest monthly salary paid the teachers in the city was $68.13. In the county elementary schools the highest monthly salary paid white teachers by any county in the state was $153.05,

whereas to teachers in city elementary schools $271.00 was the highest monthly salary paid. The median salary paid men teachers in county elementary schools was $80.00 per month, while the median monthly salary paid men teachers in city elementary schools was $134.16. The median salary paid white women teachers in the county elementary schools was $73.06, while the median salary paid

TABLE III

MONTHLY SALARIES PAID IN SCHOOL YEAR 1926–27 TO WHITE TEACHERS IN COUNTY ELEMENTARY SCHOOLS IN NINETY-TWO COUNTIES AND TO WHITE TEACHERS IN CITY ELEMENTARY SCHOOLS IN FIFTY-SEVEN COUNTIES

MONTHLY SALARY	COUNTY SCHOOLS		CITY SCHOOLS	
	Men	Women	Men	Women
$40–49	1	0	0	0
50–59	0	1	0	0
60–69	8	28	0	1
70–79	35	49	1	12
80–89	29	7	1	20
90–99	10	1	3	14
100–109	1	1	5	3
110–19	1	0	1	2
120–29	0	0	10	0
130–39	1	1	6	2
140–49	0	0	2	0
150–59	2	0	2	0
160–69	0	0	5	0
170–79	0	0	1	0
180–89	0	0	1	0
190–99	0	0	0	0
200–249	0	0	6	0
250–99	0	0	3	0
Median	$80.00	$73.06	$134.16	$87.00

white women teachers in the city elementary schools was $87.00. Because of these great differences in salary it is not surprising that the city schools secured better trained teachers than did the county schools.

Value of school property.—The estimated value of the property of the white, county elementary schools was $42.33 per child enrolled; for white, city elementary schools, $84.70, or double the value of the property of the county schools. These data, which were derived from the 1927 report of the commissioner of education of Tennessee,

constitute a sufficiently critical commentary on the inequalities prevailing between white, county elementary schools and city elementary schools so far as the value of school property is concerned.

Length of school term.—The average length of the school term in the white, county elementary schools in 1926–27 was 158 days; in the white, city elementary schools, 189 days, a difference of 31 days in favor of the city elementary schools.

In so far as the factors compared may be accepted as criteria for evaluating educational opportunities, the conclusion is justified that there are significant inequalities in these opportunities in the county and city schools.

INEQUALITIES IN EDUCATIONAL OPPORTUNITIES AMONG COUNTIES

The inequalities in educational opportunities existing in the nine selected counties in Tennessee are considered with reference to (1) the assessed valuation of property and the value of school property per child enrolled in school; (2) the school expenditures as measured by the number of teachers, the number of children enrolled, the number of pupils in average daily attendance, and the amount paid for the salaries of teachers; (3) the percentage of the school enrolment in average daily attendance, the percentage of the scholastic population enrolled, and the length of school term; and (4) the qualifications of the teachers (training, certification, and experience).

Valuation of wealth and school property.—The assessed valuation of wealth and the value of school property[1] in the following nine counties are compared on the basis of the assessed valuation per child enrolled in school: the two richest counties, Davidson and Shelby; the two poorest, Overton and Pickett; the middle ranking, Anderson, Monroe, and Cocke; and the two quartile counties, Rutherford and Jackson. This comparison is set forth in Table IV. This table shows that Davidson and Shelby, the two richest counties in the state, are almost eight times as able to provide school revenues as are Overton and Pickett, the two poorest counties in the state. With respect to the value of school property, the two rich-

[1] This information was secured from the *Biennial Report of the State Superintendent of Public Instruction, 1921–22*, pp. 166–67. Nashville, Tennessee: Department of Education, 1922.

est counties in the state rank third and first among the nine selected counties and have more than five times as much school property per

TABLE IV

WEALTH OF NINE SELECTED TENNESSEE COUNTIES AND VALUE OF ELEMENTARY-SCHOOL PROPERTY PER CHILD ENROLLED IN ELEMENTARY SCHOOLS IN 1922

County	Wealth		Value of School Property	
	Amount	Rank among the Counties in the State	Amount	Rank among Nine Selected Counties
Davidson	$5,894	1	$59.59	3
Shelby	5,813	2	87.07	1
Rutherford	2,352	24	49.31	4
Anderson	1,784	47	67.79	2
Monroe	1,769	48	27.79	6
Cocke	1,762	49	31.54	5
Jackson	1,331	72	23.20	7
Overton	794	94	8.92	9
Pickett	747	95	11.32	8

TABLE V

ELEMENTARY-SCHOOL EXPENDITURES OF NINE SELECTED COUNTIES AND THE AVERAGE MONTHLY SALARY OF TEACHERS IN SCHOOL YEAR 1926–27

County	Expenditures per Child Enrolled	Expenditures per Child in Average Daily Attendance	Expenditures per Teacher Employed	Average Monthly Salary of Teachers
Davidson	$39.81	$53.94	$1,330.89	$126.30
Shelby	60.74	82.04	2,374.99	142.95
Rutherford	27.18	42.91	1,030.32	75.31
Anderson	27.22	31.67	1,109.08	75.27
Monroe	20.55	38.73	818.42	71.88
Cocke	15.56	25.60	610.85	66.12
Jackson	17.84	25.82	699.42	73.16
Overton	15.43	28.41	551.24	71.29
Pickett	12.34	23.60	524.46	70.41

child enrolled as the two poorest counties in the state, which rank ninth and eighth among the nine selected counties.

School expenditures.—The teachers' average monthly salaries and the school expenditures in the school year 1926–27 in nine selected counties per child enrolled, per child in average daily attendance, and per teacher are given in Table V. This table makes it apparent

that the inequalities in school expenditures in the nine selected Tennessee counties were outstanding. Davidson County and Shelby County, the two richest counties in the state, expended, respectively, $39.81 and $60.74 per child enrolled as compared with Overton County and Pickett County, the two poorest counties in the state, which expended $15.43 and $12.34, respectively. The two richest counties and the two poorest counties show about the same degree of variation in expenditures per child in average daily attendance that obtains in the expenditures per child enrolled. A similar variation exists with regard to expenditures per teacher employed and the average monthly salary of teachers. With only two exceptions the expenditures of the two richest counties in the state were the greatest, and those of the two poorest counties the smallest, of those of any of the nine counties selected on the basis of wealth. When all the items are considered, the general variations of expenditures are, with few exceptions, in descending order from the richest to the poorest of the nine selected counties. This fact indicates some correlation between wealth of counties and expenditures for schools. At least, this correlation is close enough to operate to the disadvantage of the poorest counties in the group studied.

Enrolment, attendance, and length of school term.—The percentage of the scholastic population enrolled, the percentage of the enrolment in average daily attendance, and the lengths of the school terms in white elementary schools in the nine counties in the school year 1926–27 are presented for comparison in Table VI. This table shows that the two richest counties in the state, Davidson and Shelby, rank below the two poorest counties in the state, Overton and Pickett, in the percentage of the scholastic population enrolled in school. It is possible that the poorest counties failed to enumerate some children who should be included in the scholastic population and that, consequently, the enrolment appears high in proportion to the scholastic population. Especially does such seem to be the case in Cocke County where the enrolment is reported to be 108.5 per cent of the scholastic population. The percentage of enrolment in average daily attendance in the two wealthiest counties ranks far above that in the two poorest counties in the state. When the lengths of the school terms of the two richest and the two poorest

counties are compared, it is obvious that children living in the wealthy counties had much greater educational opportunities than did those residing in the poor counties.

TABLE VI

ENROLMENT, ATTENDANCE, AND LENGTHS OF SCHOOL TERMS IN WHITE ELEMENTARY SCHOOLS IN NINE SELECTED COUNTIES IN SCHOOL YEAR 1926–27

County	Percentage of Scholastic Population Enrolled	Percentage of Enrolment in Average Daily Attendance	Number of Days in School Term
Davidson	87.1	75.0	175
Shelby	79.8	74.0	180
Rutherford	94.6	63.3	158
Anderson	85.5	68.1	157
Monroe	89.8	53.0	154
Cocke	108.5	60.6	155
Jackson	98.6	69.0	159
Overton	97.5	55.2	144
Pickett	91.2	55.2	148

TABLE VII

PERCENTAGE DISTRIBUTIONS OF WHITE ELEMENTARY-SCHOOL TEACHERS IN NINE SELECTED COUNTIES IN 1922 ACCORDING TO EDUCATIONAL PREPARATION*

County	Elementary School Only	Part High School	High-School Graduate	Part Normal School	Academic Normal School	Normal-School Graduate	Part College	College Graduate
Davidson	0.41	15.10	40.00	4.49	8.57	2.45	22.86	6.12
Shelby	0.81	5.91	24.11	37.82	1.52	6.95	17.72	5.16
Rutherford	10.22	43.75	18.75	2.27	11.93	5.12	3.98	3.98
Anderson	0.00	35.06	45.37	10.30	1.03	2.06	3.09	3.09
Monroe	4.58	35.12	36.64	9.16	0.76	3.82	6.10	3.82
Cocke	32.31	30.75	19.23	4.62	0.00	1.54	6.16	5.39
Jackson	15.73	78.65	5.62	0.00	0.00	0.00	0.00	0.00
Overton	66.66	21.51	11.83	0.00	0.00	0.00	0.00	0.00
Pickett	46.88	43.75	3.12	6.25	0.00	0.00	0.00	0.00

* Data derived from Fletcher Harper Swift and John Harold Goldthorpe, *Studies in Public School Finance: The South—Arkansas, Oklahoma, Alabama, Tennessee*, p. 175. Research Publications of the University of Minnesota, Education Series, No. 4. Minneapolis, Minnesota: University of Minnesota, 1925.

Qualifications of teachers.—The training of the teachers in the white elementary schools in the nine selected counties is shown in Table VII. The richest counties, Davidson and Shelby, at the time these data were assembled had the highest percentages of teachers trained beyond the high school, 44.49 per cent and 69.17 per cent,

respectively, whereas in Pickett County, the poorest county in the state, only 6.25 per cent of the teachers possessed a similar training. Jackson and Overton, the next poorest counties in this group had no teachers who were trained beyond the high school, while only two of the thirty-two teachers in Pickett County had as much as a partial normal-school training. Jackson, Overton, and Pickett counties had no teachers who were graduates of either a normal school or a college.

The inequalities in the preparation of the teachers in these counties are even more striking when the teachers whose training was below the high-school level is considered. In Davidson County and Shelby County 15.51 per cent and 6.72 per cent, respectively, of the elementary-school teachers possessed a training below that of high-school graduation; the corresponding percentage is 94.38 in Jackson County, 88.17 per cent in Overton County, and 90.63 per cent in Pickett County. In Overton County and Pickett County, the two poorest counties in the state, two-thirds and almost one-half, respectively, of the white elementary-school teachers employed were graduates of the elementary school only and did not possess training beyond that given in the schools in which they were teaching. On the other hand, less than 1 per cent of the teachers employed in each of the two richest counties in the state were graduates of the elementary school only. The inequalities in the training of the teachers in these counties correlate closely with the wealth of the counties.

The inequalities in the qualifications of the teachers in the nine counties are further shown in Table VIII, which shows the number of teachers possessing teachers' licenses of the highest and lowest types, that is, permanent professional certificates (requiring two or more years of training above the high school) and permits to teach (having no specifications relative to training). The data in this table contribute abundant evidence of the extent of the inequalities in certification of the teachers in the white elementary schools in the nine counties investigated. In the richest counties, Davidson and Shelby, the percentages of teachers who held permanent professional certificates are 20.0 and 59.7, respectively, while 30.8 per cent in Rutherford County held the permanent certificate. The teachers of these same counties held the lowest type of certificates issued by the

state, the permit, in such small percentages as 1.6. There are at least two possible explanations for the large number of teachers who held permanent professional certificates in these counties. One explanation is that these are the wealthiest counties in the group, and the other is that in each of these counties are located a large teachers' college and one or more other colleges. In contrast with these counties it may be noted that only 4.6 and 2.8 per cent of the teachers in the two poorest counties in the state, Overton and Pickett, held permanent professional certificates, while 8.4 per cent of the teachers in Overton County and 22.2 per cent of those in Pickett County held permits.

TABLE VIII

INEQUALITIES IN CERTIFICATION AND EXPERIENCE OF THE WHITE ELEMENTARY-SCHOOL TEACHERS IN NINE SELECTED COUNTIES IN THE SCHOOL YEAR 1926–27

COUNTY	NUMBER OF TEACHERS EMPLOYED	TEACHERS HOLDING PERMANENT PROFESSIONAL CERTIFICATES		TEACHERS HOLDING PERMITS		TEACHERS WITHOUT EXPERIENCE	
		Number	Per Cent	Number	Per Cent	Number	Per Cent
Davidson	255	51	20.0	4	1.6	23	9.0
Shelby	243	145	59.7	4	1.6	10	4.1
Rutherford	107	33	30.8	0	0.0	31	29.0
Anderson	87	6	6.9	3	3.4	26	29.9
Monroe	123	7	5.7	3	2.4	34	27.6
Cocke	127	6	4.7	45	35.4	25	19.7
Jackson	95	6	6.3	16	16.8	12	12.6
Overton	131	6	4.6	11	8.4	40	30.5
Pickett	36	1	2.8	8	22.2	1	2.8

With the exception of Pickett County, the counties of Davidson and Shelby had smaller percentages of teachers without experience than did the other counties. Except in these two counties there seems to be little, if any, correlation between teacher turnover and the wealth of the county, for Pickett, the poorest county in the state, had the lowest percentage of turnover (2.8) of any of the counties in this group.

SUMMARY

1. A comparison of the experience, training, certification, and salaries of teachers; the value of school property per child enrolled;

and the length of school terms in white, county and city elementary schools shows that in all six items the city schools were favored by a wide margin.

2. A comparison of the assessed valuation of wealth; the value of school property per child enrolled in school; the school expenditures as measured by the number of teachers, the number of children enrolled, the number of children in average daily attendance, and the amount expended for the salaries of teachers; the percentage of the school enrolment in average daily attendance; the percentage of the scholastic population enrolled; the length of the school terms; and the qualifications of the teachers in nine selected counties shows that the wealthiest counties had the advantage in all but two of the twelve factors. The two factors for which no advantage was shown for the wealthiest counties are the percentage of scholastic population enrolled in school and the experience of the teachers.

3. If the factors considered are adequate criteria for determining educational opportunities, it may be concluded that marked inequalities existed between county and city white elementary schools and in the white elementary schools in the nine selected counties.

THE ELEMENTARY-SCHOOL NEWSPAPER

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The school newspaper has long been considered an important extra-curriculum activity in the high school. As early as 1851 newspapers were issued by high schools in Hartford, Connecticut, by the Boston Latin School, and by the Girls' High School, Portland, Maine.[1] These early papers were extra-curriculum activities in the most modern sense as they were organized, written, and edited by the pupils as mediums through which talents for the writing of stories, poetry, essays, jokes, and editorials were displayed. In the later stages of development the high-school newspapers were utilized as curricular material in courses in English and journalism. At present a paper is usually conducted either in connection with a class in English or as an extra-curriculum activity for which the participating pupils receive credit. Whatever the status of the school paper in the organization of the activities of the high school, its value as a socializing factor and as a means of encouraging written expression and influencing community opinion with respect to the school is well established.

The school paper has not attained so high a degree of development in the elementary school as in the junior and senior high schools. However, there seems to be no valid reason why it should not prove fully as vital and effective in this newer field. It is just as important that extra-curriculum activities render their services in socializing the pupil in the elementary grades as in the higher levels of school work. If organized pupil activities have values in effecting the many-sided development of the child, why postpone them until the junior or senior high school period is reached? Since the school paper is well established as a socializing factor, it may, without doubt, occupy a wide sphere of influence in the elementary

[1] Alexander Crippen Roberts and Edgar Marian Draper, *Extraclass and Intramural Activities in High Schools*, p. 163. Boston: D. C. Heath & Co., 1928.

school. It is the purpose of this article to present a statistical analysis and comparison of the outstanding elements of thirty-five representative newspapers and one special newspaper in the elementary schools of Chicago.

The study here described had its origin in the activities of the journalism club of the Gladstone Elementary School during the spring semester of 1929. One of the major activities of the club was the reading of school papers secured through exchanges with a view to finding suggestions for improving the local school paper, which had just been established. This practice was continued during the following school year; and, as the interest in the content and makeup of the school papers grew and as the possibilities of improving school journalism through acquiring wider knowledge of the practices of elementary-school papers were sensed, it was decided to make a more comprehensive investigation than the limitations of the club permitted. Accordingly, a greater number and variety of elementary-school papers were secured, and a systematic study of the materials was begun.

Thirty-five representative elementary-school newspapers were secured for study, of which twenty-four were printed papers and eleven were mimeographed papers. Two numbers of each paper issued during the school year 1929–30 were carefully analyzed with respect to the type of school from which it was issued, the auspices of publication, the method of financing, the mechanical makeup, the general form, and the content. In order that the data obtained might be entirely objective, all facts were secured from analyses of the papers, no questionnaires being employed. The content of the papers was determined by obtaining the number of square inches of space devoted to each feature in the two copies of each paper.

Table I contains data concerning the types of elementary schools in which printed papers are published, the names of the papers, by whom published, and the methods of financing. The table should be read as follows: School 1 contains a kindergarten and eight grades. Its enrolment is 952, and the organization is the regular type ordinarily found in elementary schools. Its school paper is named the *Microphone*. It is published by the parent-teachers' association and is financed by means of advertising. Table II contains

data for the mimeographed papers; these papers are published and financed by the schools.

The data in Table I show that fourteen, or 58.3 per cent, of the printed papers are under the direction of the parent-teachers' asso-

TABLE I

DATA CONCERNING TWENTY-FOUR ELEMENTARY SCHOOLS* AND THE PRINTED SCHOOL PAPERS WHICH THEY ISSUED DURING THE SCHOOL YEAR 1929–30

School	Highest Grade†	Enrolment	Type of Organization‡	Name of Paper	Published under Auspices of—	Method of Financing
1.....	VIII	952	Regular	Microphone	Parent-teachers' association	Advertisements
2.....	VIII	1,690	Regular	Co-worker	Parent-teachers' association	Advertisements
3.....	VIII	1,459	Regular	Breeze	Eighth-grade pupils	Subscriptions and advertisements
4.....	VIII	1,462	Regular	News	Parent-teachers' association	Advertisements
5.....	VIII	1,461	Regular and program	News	Pupils	Subscriptions and advertisements
6.....	VIII	1,365	Regular and half-day	Message	Parent-teachers' association	Subscriptions and advertisements
7.....	VI	875	Regular	Chat	Parent-teachers' association	Advertisements
8.....	VI	1,650	Regular	Civic Beacon	Civic club	Dues and advertisements
9.....	VI	1,400	Regular	Telital	Parent-teachers' association	Advertisements
10.....	VIII	898	Regular	Herald	Pupils	Advertisements
11.....	VIII	1,374	Regular	News	Parent-teachers' association	Advertisements
12.....	VIII	1,300	Regular and industrial	Line	Pupils	Subscriptions
13.....	VIII	1,718	Regular	Lantern	Parent-teachers' association	Advertisements
14.....	VIII	1,600	Regular and program	Journal	Pupils	Subscriptions
15.....	VIII	1,842	Regular	News	Parent-teachers' association	Advertisements
16.....	VIII	1,098	Rotary	Call	Pupils	Subscriptions
17.....	VIII	1,466	Regular	News	Parent-teachers' association	Subscriptions and advertisements
18.....	VIII	1,240	Regular, half-day, and rotary	Herald	Pupils	Advertisements
19.....	VIII	1,725	Regular and double	News	Pupils	Subscriptions and advertisements
20.....	VI	650	Regular	Chips	Parent-teachers' association	Subscriptions and advertisements
21.....	VI	1,320	Regular	News	Pupils	Subscriptions
22.....	VIII	883	Regular	Reminder	Parent-teachers' association	Advertisements
23.....	VIII	983	Regular	Stone	Parent-teachers' association	Advertisements
24.....	VIII	715	Regular	Monthly	Parent-teachers' association	Advertisements

* The data concerning the grades, enrolments, and types of organization in these schools were obtained from the *Directory of the Public Schools of the City of Chicago, 1929–1930*. Chicago: Board of Education.

† All schools have kindergartens.

‡ The term "program" refers to a modification of the platoon plan; "double," to schools in which pupils are divided into two sections, each occupying the building one-half of an extended day; "half-day," to schools in which primary pupils attend one-half the regular day; "industrial," to schools in which pupils of upper grades spend one-fourth or one-fifth of their time in industrial work; and "rotary," to schools in which certain divisions are scheduled for academic instruction in home rooms during periods in which pupils of the home rooms are in special rooms.

ciations; that nine, or 37.5 per cent, are managed by pupils under faculty direction; and that one paper is the organ of the civic clubs of the school. When advertisements are the chief source of revenue, the advertising firms frequently secure the advertisements, furnish a portion of the content, and publish the newspaper for the parent-teachers' associations. It is evident, therefore, that the problems of organizing, editing, publishing, and financing are quite removed from consideration by pupils or teaching staff in more than one-half the elementary schools having printed papers.

TABLE II

DATA CONCERNING ELEVEN ELEMENTARY SCHOOLS HAVING MIMEOGRAPHED NEWSPAPERS DURING SCHOOL YEAR 1929–30 AND NAMES OF THE PAPERS*

School	Enrolment	Name of Paper
1	1,331	Bugle
2	1,185	Scoop
3	1,280	Educator
4	660	Bugle Call
5	598	Reporter
6	382	Gazette
7	968	News
8	988	Journal
9	1,175	Newsette
10	883	News
11	775	News

* All the schools represented in this table have eight grades and kindergartens, and all have organizations of the regular type. School 3 runs double sessions.

Advertisements are contained in twenty of the printed papers and in one of the mimeographed papers. Four printed papers published by the schools and three published by parent-teachers' associations are supported jointly by subscriptions and advertisements. Of the printed papers supported solely by advertisements, eleven are published under the auspices of the parent-teachers' associations and two by the schools. Four printed papers published by pupils are supported wholly by subscriptions. The subscription rates for the printed papers range from two to ten cents a copy. Two mimeographed papers have subscription rates of one cent a copy. In general, the paper and stencils for mimeographed papers are furnished by the schools. Thus, the newspapers are made available to the pupils without charge.

The data concerning types of schools show that the printed papers are generally found in the larger schools. The median enrolment of schools having printed papers is 1,370; the median enrolment of schools having mimeographed papers is 968. Five of the schools having printed papers are six-grade elementary schools, while all the schools having mimeographed papers are eight-grade schools. The type of organization of the school does not appear to be a material factor in determining the kind of paper a given school issues.

The names of the papers show considerable variety. "News," the only name utilized more than twice, appears seven times as the name of a printed paper and three times as the name of a mimeographed paper.

Thirteen of the printed papers and two of the mimeographed papers have covers. Four printed papers and none of the mimeographed papers contain headlines. Twenty-two of the printed papers and seven of the mimeographed papers give the dates of the issues. Only seven of the papers are organized with definite sections for the various types of material. The mimeographed papers are typed on either one or both sides of the sheet, contain from two to fourteen pages of one or two columns, and are either eight and one-half by eleven inches or eight and one-half by thirteen inches in size.

Detailed data with regard to the size, the number of columns, and the number of pages of the printed papers are shown in Table III. The variety in the size and makeup of the printed papers is much greater than that of the mimeographed papers. The size seven by ten inches has the greatest frequency, followed closely by the sizes six by nine inches and eight and one-half by eleven inches. Thus, in the printed elementary-school paper the trend is distinctly in favor of the small sizes. The most popular numbers of columns are two and three, respectively, which together are found in five-sixths of the printed papers included in the study. Four pages is the number of pages most frequently utilized. Simplicity and avoidance of extremes are found to be the outstanding characteristics in the form and makeup of the printed elementary-school paper.

The content of the papers was classified according to thirteen main divisions, as shown in Table IV. While most of these divisions are self-explanatory, some may require explanation. "Board of education news" includes all news concerning finances, legislation, build-

ing programs, and news issued by the central office of the board of education which was thought to be of interest to the community, such as growth of the schools, explanations of policies of the central office, and community civic assemblies called by the superintendent of schools. "Creative literary effort" refers to letters, poems, and stories contributed by pupils. "School news" includes all personal

TABLE III

SIZE, NUMBER OF COLUMNS, AND NUMBER OF PAGES OF TWENTY-FOUR PRINTED ELEMENTARY-SCHOOL NEWSPAPERS IN CHICAGO IN SCHOOL YEAR 1929–30

Makeup Feature	Number of Papers	Percentage of Papers	Rank
Size:			
6 by 9 inches	5	20.83	2.5
7 by 10 inches	6	25.00	1
8 by 10 inches	2	8.33	5
8½ by 11 inches	5	20.83	2.5
9 by 12 inches	3	12.50	4
10 by 16 inches	1	4.17	7
12 by 16 inches	1	4.17	7
12 by 19 inches	1	4.17	7
Number of columns:			
1	1	4.17	4.5
2	12	50.00	1
3	8	33.33	2
4	1	4.17	4.5
5	2	8.33	3
Number of pages:			
4	9	37.50	1.5
6	2	8.33	3.5
8	2	8.33	3.5
10	1	4.17	5.5
12	1	4.17	5.5
16 or more	9	37.50	1.5

items concerning pupils, alumni, and teachers, as well as official announcements and explanations of policies of the school.

The five leading topics in the printed papers are advertisements, creative literary effort, community news, school news, and reprints, in the order named. The topics of corresponding rank in the mimeographed papers are creative literary effort, school news, extra-class activities, cuts, and humor. Thus, the school papers of both types emphasize creative literary effort on the part of the pupils and local school news. All five leading features of the mimeographed papers

show the content of these papers to be focused on matters of local school interest to a much greater extent than is the case in the printed papers. The fact that community news and reprints, items which are almost negligible in the mimeographed papers, are emphasized to so great an extent in the printed papers may be due to the fact that many of the latter are controlled by parent-teachers' associations. The greater emphasis on advertising which is shown in the printed papers may be attributed to the heavier burden of financing papers of this type.

TABLE IV

PERCENTAGE OF SPACE AND RANKS OF THIRTEEN TYPES OF CONTENT IN TWENTY-FOUR PRINTED AND ELEVEN MIMEOGRAPHED ELEMENTARY-SCHOOL NEWSPAPERS IN CHICAGO IN SCHOOL YEAR 1929–30

CONTENT	PRINTED PAPERS		MIMEOGRAPHED PAPERS	
	Percentage	Rank	Percentage	Rank
Advertisements	28.02	1	1.45	9
Board of education news	1.06	11	2.49	6
Community news	15.08	3	0.30	11
Creative literary effort	15.19	2	33.52	1
Cuts	7.16	6	11.83	4
Editorials	3.51	8	1.08	10
Exchanges	0.34	12	0.00	12.5
Extra-class activities	5.23	7	15.47	3
Humor	2.24	9	7.25	5
List of staff members	1.90	10	1.47	8
Reprints	7.30	5	1.82	7
School news	12.76	4	23.32	2
Table of contents	0.20	13	0.00	12.5

The data concerning content furthermore reveal definite deficiencies in the emphasis placed on various topics. For example, neither type of paper gives a sufficient amount of space to news from the board of education. Likewise, the space devoted to editorials is small. The mimeographed papers place surprisingly little emphasis on community news, and the printed papers place little emphasis on extra-class activities.

The next source of factual material to be considered was the *Gladstone-Brainard Civic Beacon* for the school year 1929–30. Its content was deemed significant because the eight issues of the paper for 1929–30 represent the results of a year of studious and painstak-

ing effort on the part of the principal, a selected faculty committee, and the pupil staff to fit the school paper effectively to the needs of a six-year elementary school and its community. This paper is the official publication of the Gladstone Civic Club of the Gladstone Elementary School in Chicago. The features of the paper are written by pupils, by pupils and teachers jointly in classes or groups, and at times by teachers themselves.

The *Gladstone-Brainard Civic Beacon* is seven by ten inches in size and contains four pages of three columns each. It has no cover, but the title, the volume number, and the date of issue are given at the top of the first page. The general organization provides that materials of definite types appear on given pages. For example, the materials of the first page include a headline and right-hand column dealing with some phase of school-board publicity, a picture of a school official or a school building in the middle column, and a left-hand column dealing with an activity of the school considered to be of special interest to the people of the community. The second page contains a list of staff members, an editorial, a serial story by a pupil author, and other creative effort of the pupils. The contents of the third page consist in news of the Brainard branch of the school and creative literary effort of its pupils. The fourth page is devoted to extra-class activities, humor, school news, and an advertisement of the community bank.

Inspection of the data of Table V shows that the civic theme is very prominent in the content of this paper, an outcome to be expected in a publication of a civic club. More than one-fourth of the content is devoted to extra-class activities—the socializing agencies of the school—and approximately one-tenth to news supplied by the board of education, constituting news of schools and city-wide civic and social movements sponsored by the superintendent. The fact that a considerable proportion of the school news and editorials is devoted to civic subjects gives additional emphasis to the civic theme in the paper. A relatively large proportion of space is devoted to creative literary effort. Less attention is given to cuts, humor, and school news than is the case in the mimeographed papers.

The coefficient of correlation between the rank orders of types of content in the *Gladstone-Brainard Civic Beacon* and the types of

content in the twenty-four printed papers, computed by the Spearman rank method, was found to be .55. The corresponding coefficient of correlation between the *Gladstone-Brainard Civic Beacon* and the eleven mimeographed papers was .73. When the printed papers were separated into two groups, one consisting of papers controlled by the parent-teachers' associations and the other consisting of papers controlled by the schools, the coefficient of correlation between the *Gladstone-Brainard Civic Beacon* and the papers sponsored by the parent-teachers' associations was found to be .44; that

TABLE V

PERCENTAGE OF SPACE AND RANKS OF THIRTEEN TYPES OF CONTENT IN EIGHT ISSUES OF THE "GLADSTONE-BRAINARD CIVIC BEACON" DURING SCHOOL YEAR 1929–30

Content	Percentage	Rank
Advertisements	12.70	4
Board of education news	9.50	5
Community news	1.23	10
Creative literary effort	17.87	2
Cuts	3.68	8
Editorials	6.79	6
Exchanges	0.00	12.5
Extra-class activities	26.86	1
Humor	1.17	11
List of staff members	3.76	7
Reprints	3.67	9
School news	12.75	3
Table of contents	0.00	12.5

between the Gladstone paper and the papers issued by the schools, .78. Thus, with respect to content, the *Gladstone-Brainard Civic Beacon* shows a much higher degree of relation with papers controlled by the schools, both printed and mimeographed, than with those controlled by the parent-teachers' associations.

Other correlations were found to be as follows: content of entire group of printed papers with content of entire group of mimeographed papers, .45; entire group of printed papers with printed papers controlled by parent-teachers' associations, .94; entire group of printed papers with printed papers controlled by schools, .71; mimeographed papers with printed papers controlled by parent-teachers' associations, .23; mimeographed papers with printed pa-

pers controlled by schools, .81; printed papers controlled by parent-teachers' associations with printed papers controlled by schools, .53. These correlations indicate a high degree of relationship between the content in mimeographed papers and that in printed papers controlled by schools, and a comparatively limited degree of relationship between content in the papers controlled by parent-teachers' associations and that in papers controlled by schools. Thus, control is seen to be a much more influential factor than form in determining the content of the elementary-school newspaper.

SUMMARY

The data presented show a great variety of trends in the control, form, and content of the elementary-school newspaper. Some papers are controlled by pupils under teacher direction; other papers, by parent-teachers' associations. The papers are either printed or mimeographed. There is a trend toward simplicity in the form of the printed papers; the typical paper measures seven by ten inches and contains four pages of either two or three columns. Both printed and mimeographed papers show a general lack of organization of content. Papers sponsored by parent-teachers' associations emphasize community news and advertisements, whereas papers controlled by schools emphasize school news and creative literary effort of the pupils. The content in a paper especially designed to meet the needs of a six-grade elementary school shows much higher relation to the content in printed and mimeographed papers controlled by schools than to the content in papers sponsored by parent-teachers' associations.

The comparative dearth of outstanding central tendencies in the form and content of the papers considered in this study suggests the need for further investigation to discover the most essential features in form and the relative importance of topics of content in newspapers for elementary schools. Such data may then be made the basis for setting up simple and effective standards for guidance in the publication of elementary-school newspapers.

Educational Writings

REVIEWS AND BOOK NOTES

The elementary-school library.—It is commonly recognized that the elementary-school library is a most potent factor in the development of an interest in reading and in the establishment of a habit of reading extensively in a variety of fields of subject matter. A recent publication[1] offers valuable assistance to elementary-school librarians and superintendents in the selection of reading material for Grades IV, V, and VI and to teachers in the stimulation and guidance of elementary-school children in their reading activities.

In Chapter I the author states the major purposes of the elementary-school library and describes in some detail the organization and management of the library in the University Elementary School of the University of Chicago. On page 8 a list of ten excellent suggestions for motivating reading activities and for guiding children in their choice of books is offered. Teachers and librarians will find the suggestions most pertinent in meeting the problem of stimulating varied and extensive reading among elementary-school children.

An analysis of the circulation records and of the reports of the children's individual reading has been made to determine the main characteristics of children's interests and the trends, changes, and continuity apparent in children's selections over a period of time. The following quotations will illustrate the quality of the comments included.

> Factual material is read extensively by both boys and girls of all three grades, and there is evidence that they would read more if it were available in well-written and attractive form suitable for juvenile readers.
>
> There is evidence that interests are aroused in history, geography, and science classes which influence children's reading. In general, girls are more responsive to these interests than are boys. . . . .
>
> Children of all three grades show considerable interest in reading biography. More biography would be read if more were suitably written. . . . .
>
> The average child in these grades shows considerable breadth of interests. A few have highly specialized interests, as one sixth-grade boy who has always confined his reading as closely as possible to various aspects of natural science.

[1] Evangeline Colburn, *A Library for the Intermediate Grades.* Publications of the Laboratory Schools of the University of Chicago, Number 1. Chicago: Department of Education, University of Chicago, 1930. Pp. iv+150. $1.25.

Sustained interest in some subjects is prominent with some children. An example of this is a fourth-grade girl who is interested in Holland and the Dutch. She wants to read everything available on these subjects. Her case parallels that of a sixth-grade girl who was absorbed in the study of India and exhausted the sources of the library on that subject.

There is a strong preference manifested for long selections, for entire books rather than collections of stories [pp. 15–16].

The analysis will be useful to any adult who is in a position to provide or suggest reading material for children of these ages.

The standardized reading-test records of children in Grades IV, V, and VI of the University Elementary School are provided in chapter ii, and it may be seen that the effect of extensive and wide library reading on the various reading skills, as measured by standardized tests, is obviously of positive value.

Miss Colburn supplies an annotated list of books which have been carefully selected on the basis of the evidence gained through several years of close contact with children in the elementary-school library, where she has watched children in their reactions to books in an informal situation and has studied the records of the reading done by the children, both in school and in the home. This experience as teacher-librarian qualifies the author to designate books of real merit which appeal to children's varied interests and are suited to different levels of reading ability. Therefore, the suggested list is tremendously valuable to librarians, teachers, and superintendents who are selecting library books for children in the middle grades of the elementary school.

DELIA E. KIBBE

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Measuring the intelligence of preschool children.—Recognition of the many difficulties faced by the investigator of the intelligence of preschool children is probably responsible for the dearth of even reasonably satisfactory intelligence scales for children under five or six years of age. An outstanding contribution to this neglected field is reported in a recent publication,[1] the work of a psychologist who has been able to draw upon the rich resources of the Merrill-Palmer School.

The book is organized in four parts: (1) "Problems and History of the Mental Testing of Preschool Children," (2) "The Merrill-Palmer Research," (3) "Guide for Administering the Merrill-Palmer Scale," and (4) "Illustrative Case Studies."

Part One presents a review of earlier tests suitable or in part suitable for testing children of preschool age and also an excellent discussion of criteria for the selection of tests for children of that age.

[1] Rachel Stutsman, *Mental Measurement of Preschool Children with a Guide for the Administration of the Merrill-Palmer Scale of Mental Tests.* Yonkers-on-Hudson, New York: World Book Co., 1931. Pp. x+368. $2.20.

Part Two reports in detail the Merrill-Palmer Research, through which the possibilities of seventy-nine old and new tests were examined. Thirty-eight of these were adapted to the requirements of the new scale. Of those retained which had already been designated useful, the following are representative: Woodworth and Wells' Action Agent Association Test; Mare and Foal Picture Completion; Wallin's Peg Boards, A and B; the Buttons and Buttonholes Test from Decroly Educative Games; and Goddard and Footes' Opposition of Thumb and Fingers Test. Among the new tests developed by the author are the following: Pyramid 1 (3 cubes), Pyramid 2 (6 cubes), Identification of Self in Mirror, Nest of Cubes, and Crossing the Feet.

The author's report furnishes evidence that the tests were selected both with the essential requirements of a testing device and with the requisites of the testing situation in mind. The final selection of tests was based on the reliability with which they differentiated children of different chronological ages, the amount of time required to administer the tests, the ease and objectivity of scoring, and, of necessity, the interest which the tests had for children of preschool age. Emphasis was given to tests of performance and other non-verbal types.

Standardization was based on the performances of 631 subjects well distributed as to age and sex and obtained from twenty different sources (Merrill-Palmer children being excluded). The author's careful analysis of the selective factors involved in sampling adds to one's confidence in the samples that she employed. Variable-score tests were broken into elements that could be scored on an all-or-none basis. The completed scale contains ninety-three separate diagnostic elements. The score may be interpreted in three ways—in terms of mental age, in terms of the score's standard-deviation value, and in terms of the percentile value of the score. Tables to facilitate the interpretation of scores are provided in Part Three.

The validity of the scale appears to be well established. The scale differentiates (1) between the performances of apparently bright and dull children of the same age, (2) between the performances of normal and feeble-minded children, and (3) between the performances of children of different age levels. The amount of overlapping of adjacent age groups is sufficiently small to indicate a real progression from one age to another. The correlation between scores made on the Merrill-Palmer Scale and on the Stanford-Binet scale was found to approximate +.80 when children three to six years of age were tested.

Part Three furnishes detailed directions for administering the test, including exact instructions for setting the stage, a description of each step in obtaining the various responses, and samples of acceptable and unacceptable performances. These procedures have been so well defined that objectivity and comparability of results seem to be assured. A guide for personality observations is also provided.

Part Four reports a number of illustrative case studies in which the scale gave evidence of usefulness in making diagnoses in planning for the future, in

dealing with children with special difficulties, and in confirming general impressions.

The study makes more feasible the examination of all children at the preschool level and makes possible more intelligent direction of the training of the preschool child. It is a scholarly presentation of a difficult problem.

HERMAN G. RICHEY

Tort liability of school districts and school-district officers.—Public-school officials are sometimes lulled into a false sense of security with regard to their liabilities and obligations by reason of the fact that the officially prepared school codes present in compact form the statutory laws with regard to schools and school officials. These codes, however, do not at all deal with case law, which is sometimes of decisive importance in determining the responsibilities and liabilities of teachers and boards of education. The case law, too, is rather frequently overlooked by the ordinary legal practitioner, with the results that public-school men often find it difficult to obtain answers to legal questions that loom large in the daily administration of schools.

Professor J. Frederick Weltzin, in his treatise on the legal authority of the school,[1] undertakes to make for public-school people a thorough study of liability to damages on the part of school corporations and school officials as revealed in American case law. The book treats the legal nature of the public-school corporation; the status of the school corporation with relation to state and municipality; the powers and duties of the corporation; the liability of the school corporation to damages for torts; and the tort liability of officers, teachers, principals, and superintendents. Although much of the value of the book consists in full citation of cases, the author does not claim to be exhaustive but merely to "examine as completely as possible all the primary authority in point on the main issues of this study so that the principles formulated . . . . will be accurate statements of the law" (p. 2). The book is valuable because it gives in concise form material that persons dealing with school problems need and cannot readily find elsewhere.

Valuable as the book is, the reader unfamiliar with legal materials should remember that the author's summary of the law, even though excellently and conservatively stated with regard to the general holdings of the courts, might not be upheld by the specific court in whose jurisdiction the reader himself happens to be employed. The first value, therefore, which the public-school man will find in the work is a general summary of principles that probably, but not certainly, apply in his jurisdiction. He should investigate rather carefully the special holdings in his own jurisdiction in important cases before committing himself or his board on the faith of the general principles laid down.

[1] J. Frederick Weltzin, *The Legal Authority of the American Public School as Developed by a Study of Liability to Damages.* University of North Dakota School of Education Bulletin No. 7. Grand Forks, North Dakota: University of North Dakota, 1930. Pp. xii+240. $1.00.

Another value of the book is that it points out to school administrators and teachers responsibilities and liabilities which are easily overlooked.

In fairness to the author it should be stated that an apparent scrappiness of treatment and a somewhat sudden veering from the careful definition in one paragraph of what seem to be simple terms to the use in the next paragraph of undefined terms whose significance seems technical are inherent in the nature of his material. The special cases dealing with school problems are, after all, merely a cross-section of cases involving the intricacies of corporation law, administrative law, the law of torts and damages, and even questions of constitutional interpretation. For the understanding of readers unfamiliar with the law, the author at times has defined terms quite simple to students of law. However, he could not hope to define all terms the meanings of which would be uncertain to many of his readers without producing an unwieldy treatise. On the whole, he is to be congratulated for his wise selection of terms that need to be defined in order to produce an understandable study.

HOLLAND HOLTON

DUKE UNIVERSITY

A local problem considered historically.—What is the value to the world at large of an intensive historical study of a local institution? A recent Doctor's dissertation,[1] which treats the development of the state department of education in one state, prompts this question. Such a study will, of course, appeal to the local clientèle. It should likewise appeal to a small but select group of students of education to be found usually in the colleges and universities located beyond the boundaries of the state. If the writer of a dissertation does not address his treatise directly to the latter group, he should at least keep their interests before him as he writes.

Obviously, readers of this class seek in the local treatise a reward more substantial than the satisfaction of their idle curiosity. They, being devoid of the local reader's pride in place, are concerned more with generalizations than with unique instances. They are accustomed to search history for facts that tend to confirm principles, for facts that tend to justify or discredit established procedures. Information per se is of less value to them than the significance of the information in relation to national or world-wide movements in thought. For such readers the local study has value in proportion as it establishes a relation between forces making for local development and forces affecting education throughout the nation. The conscientious writer may discharge his obligation to such readers by so marshaling his materials as either to develop a new principle or to test the validity of an old one.

A book with the title *A History of the Development of the Department of Public Instruction in Iowa* offers but few opportunities for generalization, and these few

[1] Robert Ervie McConnell, *A History of the Development of the Department of Public Instruction in Iowa.* University of Iowa Studies in Education, Vol. VI, No. 1. Iowa City, Iowa: University of Iowa, 1930. Pp. 122. $1.00.

seem to have escaped the notice of the author. To illustrate the point: The machinery for administering the state school system in Iowa seems to have taken shape during a period of experimentation between 1846 and 1865. Does that brief period have any special significance in the educational history of the nation? The author neglects to note the fact that a number of other states were, during the same period, going through the same experiences that Iowa was passing through. Moreover, Iowa, following the advice of Horace Mann, adopted and later rejected the Massachusetts plan of administration by means of a state board of education. Nowadays, authorities on school administration throughout the country have come to regard the Massachusetts plan with favor. The curious reader may legitimately inquire what factors prompted Iowa's shift in policy. The author is silent on this point and on other broad implications of his study.

The reviewer appreciates the value of the dissertation in preserving Iowa's educational record so far as the state administration of schools is concerned. The study is well presented, clear, and—so far as the reviewer's knowledge allows him to judge—thorough in treatment. It contributes much useful information to the chronicle of education in Iowa.

STUART G. NOBLE

TULANE UNIVERSITY

A textbook in nature-study.—A recent science book[1] written for use in the intermediate or upper grades of the elementary school undertakes to carry children into the "economic and scientific phases" of the study of nature. It is a companion volume to the author's earlier *Nature Study*, Book One, designed chiefly to arouse interest in common natural phenomena.

The twenty-eight chapters of the new book are grouped into six parts: "Order and System in Nature," "Insects," "Adaptations in Nature," "Plants," "Weeds," and "Physical Nature Study." As is evident from these titles, the emphasis of the book is on the biological aspects of environment. Many of the biological topics, as might well be expected from the fact that the author purposes to stress the economic phases of nature, are discussed from the standpoint of the agriculturist. The section devoted to physical nature-study occupies only one-eighth of the book. Three topics, "Rocks and the Soil," "Weather and Climate," and "The Solar System," are included.

All the chapters of the book are short; they range from four to thirteen pages in length. At the close of each chapter a few questions and suggestions for activities are given. The following exercises found at the conclusion of the chapter "Poisonous Insects" are representative.

1. Have you ever seen the nest of a bumblebee, paper wasp, or mud dauber? Describe it.

2. Bring to class the deserted nests of different kinds of wasps, and observe how each is constructed. How does the larva get air, heat, and food?

3. Where have you seen wasps obtain food? [p. 54]

[1] John H. Gehrs, *Nature Study*, Book Two. Chicago: American Book Co., 1930. Pp. xii+208.

The vocabulary used is simple; children in the upper grades should be able to read the material easily. However, little attempt has apparently been made to present the subject matter interestingly. Each topic is discussed in an extremely matter-of-fact style. Some chapters, indeed, are little more than outlines. Moreover, the author has followed the plan of closing each chapter with a summary, which increases the formality of the book. The style is probably explained largely by the author's point of view, which is expressed in his introductory discussion of objectives in nature-study. Here he says, "Books are only guides in the study of nature" (p. viii). Nature itself should be used, in his opinion, as the first, the middle, and the last reference. Those science teachers who believe that reading material is an important factor in broadening children's first-hand experiences with science materials will be dissatisfied with the very brief discussion accorded each topic. In the five-page discussion of the solar system, for example, no answers are to be found to such common questions as: Are planets other than the earth inhabited? Why does the moon seem to change shape? What causes eclipses? Of what are the rings of Saturn made?

No indication is given by the author as to what part of the entire intermediate- and upper-grade science course he expects the topics discussed in this book to represent. Although the topics included, if properly handled, would require a considerable amount of time, the book alone cannot be regarded as offering a well-balanced course in science because the physical aspects of the environment are not sufficiently emphasized. As a textbook for the biological units, its usefulness is limited by the fact that portions of it are too strongly colored by the agriculturist's point of view to be suitable for children in urban communities. Probably the chief service of the book will be to aid rural teachers in selecting from their environment topics worthy of inclusion in a science course and to furnish needed factual material concerning those topics.

BERTHA M. PARKER

A history arranged on the unit plan.—The author of a recent book[1] has set forth in a most fascinating way the story of our country from 1789 to the present time. The book is adapted to the interests, needs, and capacities of children in the middle grades of the elementary school.

The volume is divided into the seven following units: "How the United States Won the Respect of the Nations," "How the United States Moved Westward to the Pacific," "How One Machine Called for Another until All Our Methods of Living Were Changed," "How the Slavery Question Almost Split the Nation into Two Parts," "How the United States Became Really United in Spirit," "How the United States Became a Great Industrial Nation," "How the United States Became a World Power." Questions appear at the close of each unit, which are followed by exercises and games to be played by the pupils. The unit plan of organization as used by Miss Kelty has many features to commend it.

[1] Mary G. Kelty, *The Growth of the American People and Nation.* Boston: Ginn & Co., 1931. Pp. viii+632. $1.32.

The author has followed in her book certain very desirable educational principles and practices. Her stories are full of color and reality; they grip the interest of the children. The vocabulary used has been carefully tested. It has been checked by the Thorndike Word List and by the Graded Word List of Buckingham and Dolch. The content of the book has been so selected that the number of minimum essentials, such as proper names and dates, have been limited. Adequate emphasis has been placed on the social and economic phases of history, while military history has been reduced to a minimum. The book contains self-testing exercises, which are used as study guides. The pictures and maps of the book are well chosen and aid the pupils in visualizing the events.

All in all, Miss Kelty's book is outstanding and does well the very things that should be done in the field of history for the middle grades of the elementary school.

CHARLES GARRETT VANNEST

HARRIS TEACHERS COLLEGE

Creative music for children.—A recent contribution[1] to the Creative Music series by Mrs. Satis Coleman is devoted to drums. Although designed for children in the intermediate grades, it will also interest those of more advanced years.

A much larger book than the one under review would be necessary if more than a brief description of the many varieties and uses of this instrument were to be given. Despite the brevity of treatment, however, Mrs. Coleman, in a direct and readable style, has given a clear idea of each form discussed. The book shows careful research and study, for it presents much new and valuable information on the subject. The reader learns, for example, that in some parts of Africa the natives use a code system of drum beats much as we use the telegraph. Signals can be sent from one village to another in this way and may even be relayed from place to place for considerable distances. In a native revolt in West Africa the German government forbade the use of drums because information was quickly drummed from one place to another.

Equally interesting material is found in chapters describing the drums of ancient and modern India, China, and Japan, and of the American Indians. In each case Mrs. Coleman has told of many kinds of drums found among these primitive people, how they are made and used, and legends concerning them. The section devoted to the modern instrument takes up the introduction of drums into civilized life and their use at the present time.

One always thinks of Mrs. Coleman in connection with creative music for children because she is chiefly responsible for making the term familiar to music teachers. One has learned to expect definite helps from her writings in the field of creative music. This book fulfils expectations, for in the latter chapters the reader is told how to make and use drums. He is also given directions for read-

[1] Satis N. Coleman, *The Drum Book*. New York: John Day Co., 1931. Pp. viii+190.

ing drum music. Rhythms for dancing, drum songs, and drum orchestras are given adequate treatment, while the use of the drum with other instruments is not overlooked.

An attractive and valuable feature of the book is its many excellent illustrations. Teachers and parents will find this small volume a useful addition to their libraries, since it contains material which makes music a vital and fascinating subject.

Another book[1] about creative music, but of a type different from the one just described, is devoted to rhythmic activities for children. This book is evidently the outcome of experimental work in free activity, for the Introduction describes it as "a book of children, for children, by children," in which the authors have only collaborated. The music, written by Miss Schmidt, is from eight to sixteen measures in length and is simple in form. Rhythm suggestions by Mr. Ashton are in accord with the music and are given for each composition. They include suggested rhythmic activities, such as one-foot skip, the frog, and aeroplane. A circus unit with the dancing bear, the tight-rope walker, and trotting ponies is included as well as a playground unit with sliding board, swing, organ grinder, the fire engine, and various dances. The book is elementary in content and may suggest to inexperienced kindergarten and primary-grade teachers how to utilize music and the natural rhythmic activities of children in a simple and direct way.

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A new textbook in American history.—A recent addition to the group of textbooks in American history that are designed for use in the upper grades of the elementary school and in the junior high school is written by William Backus Guitteau.[2]

The book opens with an excellent introduction by the author, which gives the reasons for the study of American history in the upper grades. The Table of Contents indicates that the material included is comprehensive. No important subject found in the courses of study generally used in the states and cities of our land is omitted. The organization of the book is based chiefly on a somewhat strict adherence to the chronological development of American history. This is undoubtedly as it should be. Within the general chronological divisions many subjects are taken up with little attention to chronology.

The book is well written; it possesses charm and cannot fail to interest children. Details are presented pleasingly. The book is well printed and securely bound. It will stand hard usage in public schools. The illustrations are good,

[1] Anna M. Reccius Schmidt and Dudley Ashton, *Characteristic Rhythms for Children*. New York: A. S. Barnes & Co., Inc., 1931. Pp. 46. $0.80.

[2] William Backus Guitteau, *Our United States:* A History for Upper Grammar Grades and Junior High School. Newark, New Jersey: Silver, Burdett & Co., 1930. Pp. xii+626+xlvi.

and many of them seem new and unfamiliar. The maps are excellent although in a few cases—for example, the map of a Civil War campaign on page 443—they seem too detailed for the junior high school grades.

The subjects which should be presented in a textbook in American history appear, but the amount of time allotted to these subjects is sometimes poorly proportioned. Half the material in the volume deals with the period before 1820. Placing the division between semesters at a later date would have made possible the expansion of the chapters covering the history since the Civil War. The industrial development of our country since 1865 needs emphasis. Beyond question, the most important period in the evolution of American civilization has been during the past two generations, and it should be regarded as of fundamental importance.

It appears to the reviewer that the time and space devoted to military affairs are unduly large and that the details are too numerous for an elementary-school history. Dewey's operations are discussed in connection with the Spanish-American War. The hour at which the battle of Manila Bay opened, the number of Spanish sailors killed and wounded, the number of Americans wounded, and the names of the German and British admirals present shortly after the conclusion of the battle are given. The maneuvers of Admirals Sampson, Schley, and Cervera preceding the battle of Santiago are presented in detail.

The amount of material devoted to economic and social development seems too restricted. American literature, education, municipal government, discoveries and inventions, and the development of American agriculture between the years 1865 and 1915 are crowded into a single chapter. This material could, with profit, have been expanded considerably. The last three chapters of the book deal with the World War and the administrations of Harding, Coolidge, and Hoover and are, on the whole, excellent—among the best in the book. The causes of the World War are, however, treated in a somewhat superficial manner, and this treatment is unfortunate since an analysis of the underlying causes would have been fully as interesting and would have conveyed to the pupils a clearer understanding.

One of the strongest features of Guitteau's book lies in the vivid descriptions of Colonial and Revolutionary times, which are made to live again for pupils of the twentieth century.

At the end of each chapter appear a brief reference list for the teacher and another reference list for the pupils. No suggestions are offered for the solution of problems, for the drawing of graphs, or for the preparation of topics, outlines, tabulations, debates, or discussions. The book would have been greatly improved if suggestions of this type had been included for the aid of both pupil and teacher. In an appendix are included the Declaration of Independence, the Constitution, and Lincoln's Gettysburg Address, material which is valuable in itself but which nine out of ten teachers probably do not use.

The drawbacks mentioned are comparatively unimportant and detract but little from the really substantial merits of the book.

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